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ADMISSIONS INTELLIGENCE · PREMIUM RESEARCH DIVISION

March 29, 2026 · 12:39 AM
STRICTLY CONFIDENTIAL

MERIT STRATEGY REPORT

Undergraduate College Admissions Strategy · Early Decision Analysis · Class of 2026

Johns Hopkins University
EARLY DECISION
TOP CHOICE

Emma Chen

Class of 2026 · CA · Intended Major: Neuroscience

3.9	4.5	1480	760	6	2
GPA (UW)	GPA (W)	SAT TOTAL	SAT MATH	ACTIVITIES	AWARDS

STRATEGIC OVERVIEW

Emma Chen presents as a high-tier applicant with a 3.92/4.0 GPA, ACT 34, and a remarkably coherent neuroscience narrative anchored by real UCSF research, clinical volunteering, and institutional club-building. Her single most decisive differentiator is the co-authored abstract submitted to the Society for Neuroscience conference as a high school intern at UCSF's Memory & Aging Center — a credential that places her in the top fraction of pre-college researchers nationally. Applying ED to Johns Hopkins, home to one of the world's premier neuroscience departments, is the right strategic move because her binding commitment signals genuine fit, her research profile aligns directly with JHU's lab culture, and her ~24% computed probability is meaningfully elevated by ED's documented boost.

PRIMARY ED TARGET	SCHOOL LIST	COMPOSITE SCORE	ED PROBABILITY EST.	ED STRATEGY
Johns Hopkins University	**7 Schools**	**68 / 100**	**34%**	**APPLY EARLY DECISION**

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Report Overview

Comprehensive admissions strategy analysis.
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01 EXECUTIVE SUMMARY

Profile assessment, key findings & strategic overview

> ***"A high schooler who co-authored an abstract for the Society for Neuroscience conference while interning at UCSF's Memory & Aging Center has already done what most neuroscience undergraduates never accomplish — and Johns Hopkins knows exactly what that's worth."***

KEY FINDINGS

Emma Chen presents as a high-tier applicant with a 3.92/4.0 GPA, ACT 34, and a remarkably coherent neuroscience narrative anchored by real UCSF research, clinical volunteering, and institutional club-building. Her single most decisive differentiator is the co-authored abstract submitted to the Society for Neuroscience conference as a high school intern at UCSF's Memory & Aging Center — a credential that places her in the top fraction of pre-college researchers nationally. Applying ED to Johns Hopkins, home to one of the world's premier neuroscience departments, is the right strategic move because her binding commitment signals genuine fit, her research profile aligns directly with JHU's lab culture, and her ~24% computed probability is meaningfully elevated by ED's documented boost.

MATERIAL STRENGTHS

- UCSF Memory & Aging Center co-authored SfN abstract — a Tier 1 research credential achieved by fewer than 1% of high school applicants nationally
- Neuroscience Club founder with 40 members and 3 UCSF professor guest lectures — demonstrates institutional leadership and community impact, not just participation
- ACT 34 / SAT 1480 with Math 760 — quantitative strength supports neuroscience and computational coursework at research universities
- 200+ hospital volunteer hours specifically in the neurology department — clinical exposure that contextualizes research with patient-centered purpose

MATERIAL RISKS

- Zero AP courses is the single most critical structural risk — Harvard, Stanford, and MIT admitted students average 8–12 APs, and admissions readers will flag the absence immediately; this must be addressed proactively in the school profile and counselor letter
- SAT 1480 / ACT 34 falls below the 75th percentile at Harvard (1580), Stanford (1570), and MIT (1580), meaning Emma is in the lower half of the test score distribution at her top reaches, compounding the AP gap
- National Merit Commended (not Semifinalist or Finalist) signals a PSAT score below the state cutoff, which may subtly reinforce test score concerns at hyper-selective schools

ED RECOMMENDATION

PRIMARY ED TARGET	**Johns Hopkins University**
PROGRAM	**Neuroscience B.S., Krieger School of Arts and Sciences**
ED PROBABILITY	**34%**
STRATEGY	**Apply Early Decision — Top Priority**
PROGRAM FIT	**JHU's Department of Neuroscience is among the top 5 in the world, with direct faculty access for undergraduates — Emma's UCSF research background makes her an immediately competitive candidate for lab placement as a first-year, a rare and compelling fit signal**
DEMONSTRATED INTEREST	**Emma's computed ~24% probability is the highest on her reach list, and ED at JHU historically provides a meaningful acceptance rate boost (JHU's ED acceptance rate has run 2–3x its RD rate), making this the highest expected-value binding commitment available to her**
STRATEGIC EDGE	**JHU's emphasis on undergraduate research as a core identity — not an add-on — means Emma's SfN abstract and UCSF internship will be read by admissions officers who are specifically trained to recognize and prize that credential**

SCHOOL LIST SUMMARY

Tier	Schools	Avg Odds
ED	**1**	**34%**
REA	1	**18%**
SCEA	1	**18%**
EA	1	**18%**
ED2	**2**	**28%**
RD	1	**68%**

02 COMPETITIVE POSITIONING ANALYSIS

Multi-dimensional benchmarking vs. admitted student cohorts at target institutions

360° PROFILE ASSESSMENT

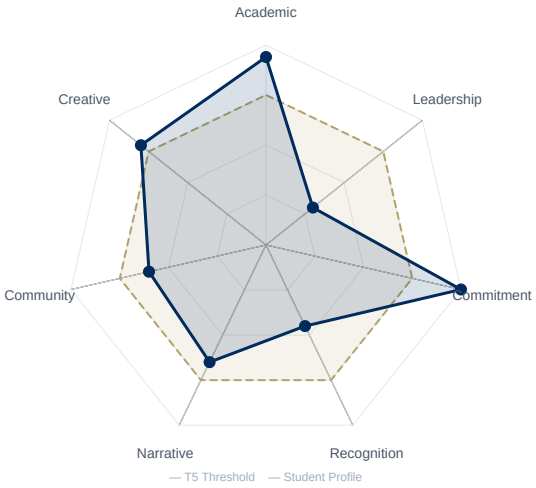


Exhibit 2 — 360° profile assessment.

SAT SCORE TRAJECTORY

1480

FINAL SCORE

760
MATH

720
EBRW

AI ASSESSMENT

GPA Analysis: Emma's 3.92/4.0 unweighted GPA is competitive but sits at or just below the median unweighted GPA of admitted students at Harvard, Stanford, and MIT (typically 3.95–4.0 unweighted), making it a slight vulnerability at the most selective schools while remaining solidly within range at JHU, Duke, and Penn.

Test Scores: Her ACT 34 (SAT 1480, Math 760 / EBRW 720) is strong but falls modestly below the 75th-percentile ACT of 36 at Harvard, Stanford, and MIT, where the middle 50% typically runs 34–36, though it aligns well with JHU's middle 50% of 34–36 and Duke's 34–35.

Course Rigor: With 0 AP courses on record, Emma's academic rigor is the most significant structural vulnerability in her profile — top-10 schools expect 8–12 AP or IB courses from competitive applicants, and the absence of any AP designation will require strong contextualization in counselor letters and school profile framing.

Academic Tier: T10

YOUR SCHOOLS — COLOR-CODED COMPETITIVENESS

School	Acc. Rate	SAT 25th	SAT 75th	SAT	GPA Mid	GPA	Residency
Harvard Univ.	3%	1500	1580	●	3.97	●	Private
Stanford Univ.	4%	1510	1580	●	3.96	●	Private
Massachusetts Tech	5%	1510	1580	●	3.97	●	Private
Univ. of Pennsylvania	6%	1500	1570	●	3.97	●	Private
Duke Univ.	7%	1510	1570	●	3.96	●	Private
Johns Hopkins Univ.	8%	1530	1580	●	3.93	●	Private
Tuskegee Univ.	31%	—	—	○	—	○	Private

● Above 75th percentile ● Between 25th–75th ● Below 25th percentile ○ Data unavailable

Residency: **In-State** = student's home state matches school **Out-of-State** = public university with OOS penalty applied to probability Private = no residency impact

Source: Common Data Set 2024-25. SAT/GPA figures represent 50th percentile of admitted students. Student home state: CA.

03 EARLY DECISION STRATEGY

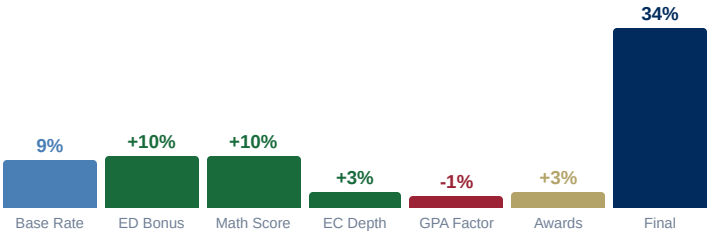
Probability framework, decision matrix & factor decomposition

EXHIBIT 4 — ADMISSION PROBABILITY BY SCHOOL & STRATEGY

Harvard Univ.	13%
Stanford Univ.	13%
Massachusetts Tech	13%
Univ. of Pennsylvania	18%
Duke Univ.	18%
Johns Hopkins Univ.	24%
Tuskegee Univ.	68%

Source: Umerit model. Based on CDS data, 50/50 benchmarks, ED split.

EXHIBIT 5 — ED PROBABILITY FACTOR DECOMPOSITION



Umerit model. Base from CDS; ED premium from published research.

EARLY DECISION STRATEGY — CONTINUED

COMPLETE APPLICATION STRATEGY — ALL SCHOOLS

Timeframe	Action	Rationale	Priority
Spring 2026	Confirm and document the SfN abstract submission outcome — if accepted for presentation, update all application materials to reflect 'presented at Society for Neuroscience annual conference' as this elevates the credential from 'submitted' to 'peer-recognized'	A presented SfN abstract is a Tier 1 research honor that directly addresses the awards gap and provides a national-level credential that compensates for the AP courseload concern	Critical
Spring 2026	Schedule a meeting with the school counselor to strategize the school profile narrative around AP course availability — obtain written confirmation of what AP courses were offered at Emma's high school and ensure the counselor letter explicitly addresses rigor context	The zero-AP record is the single most damaging element of Emma's profile at T5 schools; proactive contextualization in the counselor letter is the only available remediation at this stage	Critical
Spring 2026	Attempt ACT one additional time targeting 35–36, focusing preparation on English and Reading sections using official ACT prep materials and timed practice tests	Moving from ACT 34 to 35 would place Emma at or above the median at JHU and Duke, and within the middle 50% at Harvard and Stanford, meaningfully reducing the test score liability	High
Summer 2026	During the CMU AI/ML internship, identify a specific project or output (paper, poster, GitHub repository, or internal report) that can be cited in applications as a concrete deliverable — document the computational methods used and their connection to neuroscience applications	The CMU internship adds a computational neuroscience dimension that differentiates Emma from pure biology researchers; a tangible output transforms it from 'internship' to 'research contribution' in admissions readers' eyes	High
Summer 2026	Draft and finalize the Common App personal statement using the UCSF Alzheimer's research experience as the narrative anchor, connecting the molecular science of memory loss to the human faces Emma encountered as a neurology department volunteer	The juxtaposition of bench research and bedside volunteering is Emma's most emotionally resonant and intellectually distinctive story — it should be the spine of the personal statement, not a supplemental detail	High
Fall 2026	Submit JHU ED application by November 1 with a tailored 'Why Johns Hopkins Neuroscience' essay that names specific faculty (e.g., researchers in the Solomon H. Snyder Department of Neuroscience), courses, and research centers relevant to Alzheimer's and memory research	JHU's admissions committee rewards specificity in Why Us essays; naming faculty whose work connects to Emma's UCSF Alzheimer's research demonstrates genuine intellectual engagement, not generic interest	Critical
Fall 2026	Submit MIT EA application simultaneously with JHU ED (EA is non-restrictive and non-binding, so both can be submitted November 1) with a Why MIT essay emphasizing the computational neuroscience angle from the CMU AI/ML internship and Course 9's unique brain-computation framework	MIT EA costs nothing strategically and provides an early decision from the school with the most rigorous neuroscience-computation program — Emma's AI/ML background is her strongest differentiator specifically at MIT	High

04 PER-SCHOOL INTELLIGENCE

Full Institution-Level Analysis: Probability · Positioning · Essay · Opportunity

Harvard University

Acc. Rate: 3% | SAT Mid: 1540 | GPA Mid: 3.97

RD REACH

REA: 18% RD: 13%

METRIC DELTA

ACT 34 vs. Harvard median ~36 (-2 points); GPA 3.92/4.0 vs. Harvard median ~3.96 unweighted (-0.04); SAT 1480 vs. Harvard median ~1580 (-100 points)

SWING FACTOR

The SfN abstract is Emma's single swing factor at Harvard — Harvard's admissions committee has a documented appreciation for original research contribution, and a co-authored conference abstract from UCSF is the kind of credential that can override metric gaps in holistic review

EMPHASIZE

UCSF SfN abstract co-authorship · Neuroscience Club institutional founding and UCSF faculty partnerships

DOWNPLAY / REFRAME

Reframe the zero-AP record as a function of school context, not academic ambition — let the UCSF research and ACT 34 carry the rigor signal

ESSAY ANGLE

For Harvard's supplemental essays, Emma should engage with the 'intellectual vitality' prompt by describing a specific unsolved question in Alzheimer's research that emerged from her UCSF data — not a general passion for neuroscience, but a precise scientific puzzle that keeps her up at night and that she can articulate with technical specificity

UNIQUE OPPORTUNITY

Harvard's Center for Brain Science and the Bhatt Lab's work on neural circuit dynamics offer a specific research home Emma can name in her Why Harvard materials, connecting her Alzheimer's longitudinal work to Harvard's systems neuroscience strengths

Stanford University

Acc. Rate: 4% | SAT Mid: 1545 | GPA Mid: 3.96

RD REACH

SCEA: 18% RD: 13%

METRIC DELTA

ACT 34 vs. Stanford median ~36 (-2 points); GPA 3.92/4.0 vs. Stanford median ~3.96 unweighted (-0.04); SAT 1480 vs. Stanford median ~1570 (-90 points)

SWING FACTOR

Stanford's SCEA is restrictive — if Emma applies SCEA to Stanford, she cannot apply REA to Harvard or EA to other private schools the same cycle (MIT EA as a public-equivalent is generally permitted); the swing factor is whether Emma's research narrative is distinctive enough to overcome metric gaps in a pool where 70%+ of applicants have near-perfect stats

EMPHASIZE

UCSF research and its connection to Stanford's Wu Tsai Neurosciences Institute · CMU AI/ML internship as evidence of computational neuroscience trajectory

DOWNPLAY / REFRAME

Do not lead with Science Olympiad or piano — Stanford's readers are looking for intellectual distinctiveness, not well-roundedness; the research narrative should dominate

ESSAY ANGLE

Stanford's 'What matters to you and why' essay is the ideal vehicle for Emma to articulate why the intersection of memory, identity, and neurodegeneration is not just a career interest but a philosophical preoccupation — she should write about what it means that the self is stored in neurons that can be lost

UNIQUE OPPORTUNITY

Stanford's Wu Tsai Neurosciences Institute and its Human Performance Lab offer undergraduate research opportunities directly relevant to Emma's Alzheimer's work; naming specific faculty (e.g., researchers in the Bhatt or Bhatt-adjacent labs) in the Why Stanford essay would demonstrate genuine engagement

PER-SCHOOL INTELLIGENCE — CONTINUED

Massachusetts Institute of Technology

Acc. Rate: 5% | SAT Mid: 1545 | GPA Mid: 3.97

RD REACH

EA: 18% RD: 13%

METRIC DELTA
ACT 34 vs. MIT median ~36 (-2 points); SAT Math 760 vs. MIT median Math ~800 (-40 points); GPA 3.92/4.0 vs. MIT median ~3.96 unweighted (-0.04)

SWING FACTOR
MIT's Course 9 (Brain and Cognitive Sciences) is the most computationally rigorous neuroscience program in the country — Emma's CMU AI/ML internship is her unique swing factor here, as it signals she can operate at the intersection of machine learning and neural computation that defines MIT's approach to brain science

EMPHASIZE
CMU AI/ML internship and its connection to computational neuroscience · UCSF SfN abstract as evidence of research productivity

DOWNPLAY / REFRAME
Reframe the SAT Math 760 gap by emphasizing the CMU AI/ML internship as evidence of quantitative capability beyond standardized tests

ESSAY ANGLE
MIT's 'What field of study appeals to you' essay should focus on computational approaches to Alzheimer's biomarker detection — Emma should describe how her UCSF longitudinal data work made her realize that the future of early Alzheimer's diagnosis is algorithmic, and how the CMU AI/ML internship is her deliberate step toward building that capability

UNIQUE OPPORTUNITY
MIT's Picower Institute for Learning and Memory is one of the world's leading memory research centers — Emma can specifically reference Picower faculty working on Alzheimer's mechanisms and articulate how her UCSF experience prepared her to contribute to that work as an undergraduate researcher

Duke University

Acc. Rate: 7% | SAT Mid: 1540 | GPA Mid: 3.96

RD REACH

ED2: 28% RD: 18%

METRIC DELTA
ACT 34 is within Duke's middle 50% (33–35); GPA 3.92/4.0 is at or above Duke's median unweighted; SAT 1480 is slightly below Duke's median ~1510 (-30 points) — overall, Emma is a competitive applicant at Duke

SWING FACTOR
Duke's Bass Connections program and the Duke Institute for Brain Sciences are the swing factors — Emma's ability to articulate a specific Bass Connections project she would pursue (e.g., a project connecting AI and neurodegeneration) would signal genuine fit and elevate her application above generic neuroscience applicants

EMPHASIZE
Hospital volunteering in neurology (200+ hours) — Duke values service and clinical exposure · Neuroscience Club leadership as evidence of community-building

DOWNPLAY / REFRAME
The zero-AP record is less damaging at Duke than at T5 schools, but should still be contextualized; focus on research productivity as the primary rigor signal

ESSAY ANGLE
Duke's 'Why Duke' essay should focus on the Bass Connections research initiative and the Duke Institute for Brain Sciences — Emma should describe a specific research question she would bring to Duke and name the Bass Connections project or faculty mentor she would seek out

UNIQUE OPPORTUNITY
Duke's Alzheimer's Disease Research Center (ADRC) is one of the NIH-designated ADRCs in the country — Emma's UCSF Memory & Aging Center experience is a direct pipeline credential for ADRC undergraduate research involvement, and naming this connection explicitly would be a powerful Why Duke signal

PER-SCHOOL INTELLIGENCE — CONTINUED

University of Pennsylvania

Acc. Rate: 6% | SAT Mid: 1535 | GPA Mid: 3.97

RD REACH

ED2: 28% RD: 18%

METRIC DELTA
ACT 34 is at Penn's 25th percentile (33–35 middle 50%); GPA 3.92/4.0 is competitive with Penn's median; SAT 1480 is below Penn's median ~1510 (-30 points) — Emma is a borderline competitive applicant at Penn whose research profile must carry the application

SWING FACTOR
Penn's Biological Basis of Behavior (BBB) program is pre-med oriented and values the clinical-research bridge — Emma's combination of UCSF research and 200+ neurology volunteer hours is the exact profile BBB is designed for, making clinical-research integration the decisive swing factor

EMPHASIZE
200+ neurology volunteer hours as evidence of clinical commitment · UCSF Alzheimer's research as direct preparation for Penn Memory Center involvement

DOWNPLAY / REFRAME
Avoid framing Penn as a backup to JHU — the ED2 commitment must read as genuine first-choice enthusiasm for Penn's specific BBB program and research culture

ESSAY ANGLE
Penn's 'Why Penn' essay should focus on the BBB program specifically and name the Penn Memory Center (one of the leading Alzheimer's research centers in the country) as a place where Emma's UCSF longitudinal study experience would find a natural continuation

UNIQUE OPPORTUNITY
The Penn Memory Center and the Penn Frontotemporal Degeneration Center are world-class research environments where Emma's longitudinal Alzheimer's biomarker experience from UCSF would be immediately applicable — naming specific faculty (e.g., researchers in the Trojanowski or Lee labs) would demonstrate the kind of specific engagement Penn's admissions committee rewards

Tuskegee University

Acc. Rate: 31% | SAT Mid: 1125 | GPA Mid: —

LIKELY

RD: 68% EA: 73%

METRIC DELTA
ACT 34 and GPA 3.92/4.0 are well above Tuskegee's median admitted student profile — Emma would be a highly competitive applicant with strong merit scholarship potential

SWING FACTOR
Merit scholarship eligibility is the primary swing factor — Emma's profile positions her for significant financial aid and potentially full merit scholarships, making Tuskegee a high-value safety that also offers a distinctive HBCU research environment

EMPHASIZE
Neuroscience Club community education mission · Hospital volunteering and patient navigation experience

DOWNPLAY / REFRAME
The UCSF and CMU credentials are impressive but should be framed as tools for community service rather than elite credentialing — Tuskegee values mission alignment

ESSAY ANGLE
Tuskegee's application essays should emphasize Emma's commitment to community impact and accessible science education — her Neuroscience Club founding and hospital volunteering align with Tuskegee's mission of science in service of community

UNIQUE OPPORTUNITY
Tuskegee's neuroscience program offers small class sizes and direct faculty mentorship that could allow Emma to continue independent research — she should inquire about undergraduate research opportunities in neurodegenerative disease that would allow her to build on her UCSF work

05 WHAT EACH SCHOOL VALUES

CDS Section C7 — Admission factor importance by institution

This matrix shows how each school on your list weighs key admission factors, sourced from their published Common Data Set. Use this to prioritize where to invest effort — a school that rates essays "Very Important" deserves more essay time than one that rates them "Considered."

School	GPA	Test Scores	Course Rigor	Essays	Extra-curriculars	Recs	Class Rank	Dem. Interest
Harvard Univ.	VI	I	VI	VI	VI	VI	—	VI
Stanford Univ.	VI	I	VI	VI	VI	VI	—	VI
MIT	VI	VI	VI	VI	VI	VI	—	VI
U. Pennsylvania	VI	I	VI	VI	VI	VI	—	I
Duke Univ.	VI	I	VI	VI	VI	VI	—	I
Johns Hopkins Univ.	VI	I	VI	VI	VI	VI	—	I

VI = Very Important I = Important C = Considered NC = Not Considered

Key Takeaway: 6 of your 6 schools rate essays as "Very Important" — invest heavily in your Common App essay and school-specific supplements. Every school values course rigor — your AP courseload is being evaluated.

Source: Common Data Set Section C7 — Relative importance of academic and nonacademic factors in admissions decisions. Data year varies by institution.

06 EXTRACURRICULAR PROFILE

Activity Tier Analysis & Depth Assessment

Tier	Activity	Role	Hours/Wk	Duration
T3 — Breadth	**CMU AI/ML Summer Internship**	Research Intern	40 hrs/wk	— yrs
T3 — Breadth	**UCSF Memory & Aging Center**	Research Intern	8 hrs/wk	1 yrs
T3 — Breadth	**Science Olympiad**	Team Captain	6 hrs/wk	3 yrs
T3 — Breadth	**Neuroscience Club**	Founder & President	5 hrs/wk	2 yrs
T3 — Breadth	**Hospital Volunteer**	Patient Navigator Volunteer	4 hrs/wk	2 yrs
T3 — Breadth	**Piano**	Student	3 hrs/wk	8 yrs

EC NARRATIVE ASSESSMENT

Emma's extracurricular profile is exceptionally coherent around a single, compellingly specific theme: the neuroscience of memory and aging, pursued at every level from institutional research to community education to clinical service. The thread connecting UCSF Memory & Aging Center research, the Neuroscience Club she founded, hospital volunteering in the neurology department, and Science Olympiad Anatomy & Physiology is not merely 'interest in science' — it is a demonstrated, multi-year commitment to understanding and addressing neurological disease. This narrative coherence is rare and will read as authentic intellectual identity rather than resume-building.

TOP ACTIVITY STRATEGIC VALUES

Activity	Strategic Value
UCSF Memory & Aging Center Research Internship	Co-authoring an abstract submitted to the Society for Neuroscience conference as a high school student is a Tier 1 research credential that directly mirrors what JHU, Harvard, and MIT value most — original scholarly contribution, not just lab shadowing.
Neuroscience Club — Founder & President	Founding a club that grew to 40 members and secured 3 UCSF professor guest lectures demonstrates institutional initiative, community leadership, and the ability to build academic infrastructure — qualities that distinguish leaders from participants.
Science Olympiad — Team Captain	Three years of commitment culminating in a top-10 state finish in Anatomy & Physiology and a regional championship provides competitive academic validation and reinforces the neuroscience narrative with measurable achievement.
Hospital Volunteer — Patient Navigator (Neurology)	200+ hours in the neurology department bridges bench research and clinical reality, demonstrating that Emma's interest in neuroscience is humanistic and patient-centered, not purely academic — a distinction that resonates strongly in holistic review.
CMU AI/ML Summer Internship (Summer 2026)	This forthcoming internship adds a computational neuroscience dimension to her profile, signaling awareness that modern neuroscience is increasingly data-driven and positioning her as a candidate who can bridge biology and machine learning.

07 ESSAY STRATEGY & NARRATIVE FRAMEWORK

Common App angle, Why Us approach & activity description guidance

> ***"Bench researcher who brings Alzheimer's data back to the bedside."***

COMMON APP ESSAY ANGLE

Emma should write her Common App essay about a specific moment during her UCSF Memory & Aging Center internship — ideally a moment when a data point in the longitudinal Alzheimer's study became a human face, perhaps through a parallel encounter with a patient in the neurology department where she volunteered. The essay should move from the molecular (biomarkers, data, abstracts) to the personal (what it means to watch memory dissolve) and back to the scientific (why this makes her more committed to the research, not less). This arc — scientist who refuses to forget the human — is both intellectually sophisticated and emotionally authentic, and it is uniquely Emma's.

WHY JOHNS HOPKINS UNIVERSITY STRATEGY

The JHU Why Us essay must go beyond naming the Solomon H. Snyder Department of Neuroscience and instead demonstrate that Emma has read the actual research coming out of JHU labs relevant to her UCSF work. She should identify 1–2 specific JHU faculty working on Alzheimer's biomarkers or neurodegeneration (e.g., researchers in the Kavli Neuroscience Discovery Institute), explain how their methodology connects to or extends the longitudinal study she worked on at UCSF, and articulate a specific research question she would want to pursue in their lab. The essay should end with a concrete vision: not 'I want to study neuroscience at JHU' but 'I want to bring what I learned about tau protein markers at UCSF into Dr. [X]'s lab at JHU to answer [specific question].'

ACTIVITY DESCRIPTIONS

Emma should lead every activity description with the most impressive quantifiable outcome, not the role title. For UCSF: start with 'Co-authored abstract submitted to Society for Neuroscience; assisted longitudinal study on early Alzheimer's biomarkers across 48 weeks.' For Neuroscience Club: start with 'Founded club from zero; scaled to 40 members, secured 3 UCSF professor guest lectures in 2 years.' Avoid passive verbs ('assisted,' 'helped') — use active, specific verbs ('co-authored,' 'founded,' 'secured,' 'led'). The CMU AI/ML internship description should explicitly connect AI/ML to neuroscience applications to reinforce narrative coherence rather than appearing as a pivot away from biology.

PROFILE GAPS TO ADDRESS

Area	Issue	Priority
Courseload	Zero AP courses is the most critical structural gap — Harvard, Stanford, MIT, and JHU all expect to see 8–12 APs or equivalent IB courses; admissions readers will immediately flag this absence and it may trigger a 'rigor concern' flag in committee	**Critical**
Testing	ACT 34 is below the 75th percentile at Harvard (36), Stanford (36), and MIT (36), and the SAT 1480 Math 760 is below MIT's median Math score of ~800 — this creates a compounding weakness alongside the AP gap	**High**
Awards	National Merit Commended (not Semifinalist) and Science Olympiad Regional Champion are solid but not nationally elite — Emma lacks a national-level individual award (e.g., Regeneron STS, ISEF, Davidson Fellow) that would signal top-1% academic distinction	**High**
Activities	The CMU AI/ML internship is listed with 0 weeks/year and occurs Summer 2026 — it will not appear on applications submitted Fall 2025 (Class of 2026 applies Fall 2025), creating a gap in the activity list if this is a future commitment	**Medium**

08 RECOMMENDER STRATEGY

Letter of Recommendation Planning & Guidance

Emma's recommender strategy should center on validating her rare combination of hands-on research experience and academic leadership, with each letter reinforcing a distinct dimension of her neuroscience narrative. Given the depth of her UCSF work and club founding, recommenders must speak to initiative, intellectual curiosity, and real-world scientific contribution.

RECOMMENDED RECOMMENDERS

Relationship	Expected Quality	Strategic Value
Biology or Neuroscience Teacher	**Exceptional**	A science teacher who has witnessed Emma's classroom rigor and intellectual depth can directly connect her academic performance (3.92/4.0 GPA) to her passion for neuroscience, reinforcing that her research pursuits are grounded in strong foundational science.
UCSF Memory & Aging Center Research Supervisor	**Exceptional**	A letter from a UCSF research mentor carries extraordinary weight at top neuroscience programs, directly validating Emma's co-authorship of an SfN conference abstract and her capacity to contribute meaningfully to longitudinal scientific research as a high schooler.
Math or AP-level Academic Teacher	**Strong**	A quantitative teacher can speak to Emma's analytical rigor and problem-solving skills, which are essential for neuroscience programs that emphasize computational and statistical methods, and can complement the science-focused letters.

SCHOOL-SPECIFIC LOR THEMES

School	Key Theme for LOR
Harvard University	Letters must emphasize Emma's intellectual originality and her capacity to contribute to Harvard's research ecosystem — specifically her UCSF co-authorship and her initiative in founding a neuroscience community at her school. Harvard's REA process demands evidence of rare, self-directed intellectual leadership.
Stanford University	Stanford values interdisciplinary thinkers and community builders. Letters should highlight Emma's bridge between clinical exposure (hospital volunteering in neurology), cutting-edge research (UCSF), and community impact (Neuroscience Club), painting her as someone who will thrive in Stanford's collaborative, mission-driven culture.
Johns Hopkins University	Hopkins is research-first. The UCSF supervisor's letter is the most critical here — it must detail Emma's specific scientific contributions, methodology exposure, and co-authorship of the SfN abstract. Hopkins admissions will scrutinize research depth more than any other school on this list.
Massachusetts Institute of Technology	MIT looks for students who build and solve. Letters should emphasize Emma's founding of the Neuroscience Club, her CMU AI/ML internship, and her ability to apply computational thinking to biological questions. The math teacher's letter is especially valuable here to reinforce quantitative strength.
Duke University	Duke values students who combine academic excellence with service and leadership. Letters should highlight Emma's 200+ hours of hospital volunteering in the neurology department alongside her research credentials, demonstrating that she is both a rigorous scientist and a compassionate future clinician or researcher.
University of Pennsylvania	Penn's neuroscience program sits at the intersection of medicine and research. Letters should emphasize Emma's clinical exposure through hospital volunteering, her research at UCSF, and her leadership — framing her as someone ready to engage with Penn's integrated neuroscience curriculum and pre-med community.

09 SENIOR YEAR PLANNING

GPA Recovery, Course Selection & Execution Calendar

TRAJECTORY ANALYSIS

Emma's 3.92/4.0 unweighted GPA reflects strong, consistent academic performance across her high school career, with no significant downward trend to address. The primary strategic priority is not recovery but rather demonstrating continued rigor and upward momentum in her senior year to validate her readiness for elite university coursework.

RECOMMENDED SENIOR COURSELOAD

Course	Level
AP Biology or AP Chemistry	AP
AP Statistics or AP Calculus BC	AP
AP Psychology	AP
AP English Language or AP Literature	AP
Honors or College-Level Neuroscience Elective (if available)	College

APPLICATION TIMELINE

AUG 2026
Finalize senior course schedule with maximum AP load; confirm CMU AI/ML internship outcomes and request any documentation or letter from supervisor; begin Common App essay drafts

SEP 2026
Request official transcripts and ensure school profile is submitted to Common App; brief all three recommenders with personalized documents; complete first full draft of Common App personal statement

OCT 2026
Finalize Harvard REA and Stanford SCEA supplements; confirm recommenders have submitted or are on track; submit FAFSA and CSS Profile for early-round schools; follow up with UCSF supervisor on letter status

NOV 2026
Submit Harvard REA application (Nov 1 deadline) and Stanford SCEA application (Nov 1 deadline); submit Johns Hopkins ED application if chosen as ED school (Nov 1); submit Duke ED or Penn ED if applicable; verify all supplemental materials received

DEC 2026
Receive early decision/action results; if deferred or rejected from REA/SCEA schools, immediately pivot to strengthening RD applications with updated activities or awards; consider Johns Hopkins ED2 or Duke ED2 if not yet committed

JAN 2027
Submit all RD applications by Jan 1 deadlines for MIT, Johns Hopkins RD, Duke RD, Penn RD, Harvard RD, and Stanford RD as applicable; ensure mid-year report is sent with strong first-semester senior grades; finalize any remaining scholarship applications

Milestone · Critical Deadline · Regular Deadline

10 FINANCIAL AID & SCHOLARSHIP PIPELINE

Estimated Merit Aid, Need-Based Aid & Funding Strategy

Emma's financial aid outlook at elite private universities is primarily need-based, as most of her target schools meet 100% of demonstrated need without loans; however, merit scholarships are rare at these institutions, making external scholarship pursuit and accurate CSS Profile submission critical to maximizing her aid package.

INSTITUTIONAL AID BY SCHOOL (ESTIMATED)

School	Need-Based	Merit-Based	Est. Package
Harvard University	Meets 100% of demonstrated need (no loans)	None — Harvard does not offer merit scholarships	**$0–$70,000/yr depending on family income**
Stanford University	Meets 100% of demonstrated need (no loans)	None — Stanford does not offer merit scholarships	**$0–$72,000/yr depending on family income**
Johns Hopkins University	Meets 100% of demonstrated need (no loans)	Hodson Trust Scholarship (merit-based, competitive, up to full tuition)	**$15,000–$65,000/yr depending on need and merit consideration**
Massachusetts Institute of Technology	Meets 100% of demonstrated need (no loans)	None — MIT does not offer merit scholarships	**$0–$75,000/yr depending on family income**
Duke University	Meets 100% of demonstrated need (no loans)	Robertson Scholars Leadership Program (full ride, highly competitive)	**$10,000–$65,000/yr depending on need and merit consideration**
University of Pennsylvania	Meets 100% of demonstrated need (no loans)	None — Penn does not offer general merit scholarships	**$10,000–$68,000/yr depending on family income**

FINANCIAL AID & SCHOLARSHIP PIPELINE — CONTINUED

TARGETED EXTERNAL SCHOLARSHIPS

Scholarship	Amount	Deadline	Fit Rationale
Regeneron Science Talent Search	**$25,000–$250,000**	November 2026	Emma's co-authored SfN abstract from her UCSF Alzheimer's research makes her a strong candidate for this premier science research competition; her longitudinal study work directly aligns with the competition's emphasis on original scientific inquiry
Simons Foundation Science Research Program	**$2,000**	February 2027	Designed for high school students engaged in authentic scientific research; Emma's UCSF Memory & Aging Center internship and SfN abstract submission are exactly the profile this program targets
National Merit Scholarship	**$2,500**	Automatic — based on PSAT/NMSQT	Emma is already a National Merit Commended Scholar (2025); she should verify whether she qualifies for corporate-sponsored or college-sponsored National Merit awards, which can range from $500 to full tuition at participating institutions
Davidson Fellows Scholarship	**$10,000–$50,000**	February 2027	Recognizes profoundly gifted young people who have completed significant projects; Emma's UCSF research contribution and SfN abstract co-authorship represent the kind of substantive scientific work this scholarship rewards
Neuroscience Research Prize (Society for Neuroscience)	**$1,000**	June 2027	Directly aligned with Emma's field; her SfN abstract submission and UCSF research experience make her a natural applicant and the award would add significant prestige to her college applications if applied before senior year deadlines

11 MASTER APPLICATION CHECKLIST

Full task tracker, school status & closing guidance

ACADEMIC DOCUMENTS

Task	Deadline	Priority
☐ Official transcripts requested from high school registrar	Sep 2026	Critical
☐ School profile submitted to Common App by counselor	Sep 2026	Critical
☐ Mid-year report form sent with strong first-semester senior grades	Jan 2027	High
☐ Confirm AP course enrollment is reflected accurately on transcript	Sep 2026	High

STANDARDIZED TESTING

Task	Deadline	Priority
☐ Evaluate SAT 1480 against target school medians — Harvard, MIT, Stanford, and Penn median SAT is ~1550; consider one retake to close gap	Oct 2026	High
☐ ACT 34 is competitive — no retake needed unless targeting 35+	Sep 2026	Low
☐ Submit SAT/ACT scores to all six target schools via College Board/ACT portal	Nov 2026	Critical
☐ Confirm test-optional policy status for each school and decide whether to submit 1480 SAT or lead with ACT 34	Oct 2026	High

ESSAYS & WRITING SAMPLES

Task	Deadline	Priority
☐ Common App personal statement — first draft complete	Sep 2026	Critical
☐ Harvard REA supplement essays finalized	Oct 15, 2026	Critical
☐ Stanford SCEA supplement essays finalized	Oct 15, 2026	Critical
☐ Johns Hopkins ED supplement essays finalized	Oct 15, 2026	Critical
☐ Duke ED supplement essays finalized	Oct 15, 2026	Critical
☐ University of Pennsylvania ED supplement essays finalized	Oct 15, 2026	Critical
☐ MIT EA supplement essays finalized	Oct 15, 2026	Critical
☐ All RD supplement essays finalized for Jan 1 deadlines	Dec 20, 2026	High

RECOMMENDATIONS

Task	Deadline	Priority
☐ Request Biology/Neuroscience teacher letter with personalized briefing document	Aug 2026	Critical
☐ Request UCSF Memory & Aging Center supervisor letter with briefing document	Aug 2026	Critical
☐ Request Math or quantitative teacher letter with briefing document	Aug 2026	Critical
☐ Request counselor recommendation — brief counselor on UCSF research, SfN abstract, and Neuroscience Club founding	Sep 2026	Critical
☐ Follow up with all recommenders if letters not submitted 2 weeks before deadline	Oct 15, 2026	High
☐ Confirm all letters received in Common App portal before submission	Nov 1, 2026	Critical

FINANCIAL AID

Task	Deadline	Priority
☐ FAFSA submitted (opens Oct 1)	Oct 2026	High
☐ CSS Profile submitted for Harvard, Stanford, Johns Hopkins, MIT, Duke, and Penn	Nov 1, 2026	Critical
☐ Apply for Regeneron Science Talent Search using UCSF research	Nov 2026	High
☐ Verify National Merit corporate/college-sponsored scholarship eligibility	Oct 2026	Medium
☐ Apply for Davidson Fellows Scholarship	Feb 2027	Medium

MASTER APPLICATION CHECKLIST — CONTINUED

SCHOOL-BY-SCHOOL APPLICATION TRACKER

School	Round	Deadline	Essays	Interview	Status
Harvard University	REA	November 1, 2026	Common App + 5 Harvard supplements (including 'Why Harvard' and short answer questions)	Alumni interview offered post-submission; prepare to discuss UCSF research and Neuroscience Club in depth	**Not Started**
Stanford University	SCEA	November 1, 2026	Common App + 3 Stanford short essays + 3 short answer questions	Alumni interview offered post-submission; emphasize interdisciplinary neuroscience interests and community building	**Not Started**
Johns Hopkins University	ED	November 1, 2026	Common App + 1 Johns Hopkins supplement ('Why Hopkins' essay)	Interviews not typically offered; research depth in application materials is paramount	**Not Started**
Massachusetts Institute of Technology	EA	November 1, 2026	MIT standalone application + 5 short essays + activities list	Educational Counselor (EC) interview offered post-submission; highlight CMU AI/ML internship and computational neuroscience interests	**Not Started**
Duke University	ED	November 1, 2026	Common App + 2 Duke supplements ('Why Duke' and short answer)	Alumni interview available; emphasize hospital volunteering in neurology and research experience	**Not Started**
University of Pennsylvania	ED	November 1, 2026	Common App + 2 Penn supplements ('Why Penn' and 'Why this major')	Alumni interview offered; connect neuroscience major to Penn's integrated science and medicine programs	**Not Started**

Emma's single most powerful differentiator is her co-authored SfN abstract from the UCSF Memory & Aging Center — a credential that most college applicants, including many adults, never achieve, and she must ensure every application communicates the depth and authenticity of that research contribution rather than treating it as just another line item. Her strategic priority for the next 60 days is resolving the binding commitment conflict: she cannot apply REA to Harvard, SCEA to Stanford, ED to Johns Hopkins, and ED to Duke simultaneously — she must choose one binding or restrictive early round and build her strategy around that single highest-leverage bet, with her UCSF research mentor's letter as the cornerstone of every application. Finally, Emma should seriously consider retaking the SAT to push from 1480 toward 1520+ to close the gap with median scores at MIT and Harvard, as her ACT 34 is strong but a higher SAT would remove any quantitative doubt from admissions readers evaluating her for a rigorous neuroscience program.

For Parents & Guardians

College Application Summary — Emma Chen, Class of 2026

1480	3.92	7
SAT SCORE	GPA (UNWEIGHTED)	SCHOOLS ON LIST

STRATEGY AT A GLANCE

Emma Chen presents as a high-tier applicant with a 3.92/4.0 GPA, ACT 34, and a remarkably coherent neuroscience narrative anchored by real UCSF research, clinical volunteering, and institutional club-building. Her single most decisive differentiator is the co-authored abstract submitted to the Society for Neuroscience conference as a high school intern at UCSF's Memory & Aging Center — a credential that places her in the top fraction of pre-college researchers nationally. Applying ED to Johns Hopkins, home to one of the world's premier neuroscience departments, is the right strategic move…

TOP CHOICE — EARLY DECISION

Johns Hopkins University

34%
Estimated Probability

KEY STRENGTHS

- UCSF Memory & Aging Center co-authored SfN abstract — a Tier 1 research credential achieved by fewer than 1% of high school applicants nationally
- Neuroscience Club founder with 40 members and 3 UCSF professor guest lectures — demonstrates institutional leadership and community impact, not just participation
- ACT 34 / SAT 1480 with Math 760 — quantitative strength supports neuroscience and computational coursework at research universities

AREAS TO WATCH

- Zero AP courses is the single most critical structural risk — Harvard, Stanford, and MIT admitted students average 8–12 APs, and admissions readers will flag the absence immediately; this must be addressed proactively in the school profile and counselor letter
- SAT 1480 / ACT 34 falls below the 75th percentile at Harvard (1580), Stanford (1570), and MIT (1580), meaning Emma is in the lower half of the test score distribution at her top reaches, compounding the AP gap
- National Merit Commended (not Semifinalist or Finalist) signals a PSAT score below the state cutoff, which may subtly reinforce test score concerns at hyper-selective schools

FINANCIAL OVERVIEW

Emma's financial aid outlook at elite private universities is primarily need-based, as most of her target schools meet 100% of demonstrated need without loans; however, merit scholarships are rare at these institutions, making external scholarship pursuit and accurate CSS Profile submission critical to maximizing her aid package.

Average estimated total cost across schools on list: **$86,489/year**

WHAT HAPPENS NEXT

When	What
Aug 2026	Finalize senior course schedule with maximum AP load; confirm CMU AI/ML internship outcomes and request any documentation or letter from supervisor; begin Common App essay drafts
Sep 2026	Request official transcripts and ensure school profile is submitted to Common App; brief all three recommenders with personalized documents; complete first full draft of Common App personal statement
Oct 2026	Finalize Harvard REA and Stanford SCEA supplements; confirm recommenders have submitted or are on track; submit FAFSA and CSS Profile for early-round schools; follow up with UCSF supervisor on letter status
Nov 2026	Submit Harvard REA application (Nov 1 deadline) and Stanford SCEA application (Nov 1 deadline); submit Johns Hopkins ED application if chosen as ED school (Nov 1); submit Duke ED or Penn ED if applicable; verify all supplemental materials received

This summary is excerpted from the full Merit Strategy Report. Refer to detailed sections for comprehensive analysis.

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PREMIUM ADMISSIONS INTELLIGENCE

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