CHASE KING

Undergraduate at the University of Washington I am a curious and self-motivated senior undergraduate studying computer science, applied mathematics, and computational neuroscience. My academic and research interests revolve around computational neuroscience and artificial intelligence, elucidating universal principles of cortical computation to use as paradigms for designing intelligent machines.

TECHNOLOGIES

- ★ ★ ★ ★ ★ Java, JavaScript, HTML/CSS, Python
- ♦ ♦ ♦ ♦ ♦ React, NodeJS, Git, LaTeX
- $\bullet \bullet \bullet \diamond \diamond$ MongoDB, Redis, PHP

ACTIVITIES / ATHLETICS

Audi Cycling Team (Kryki Sports sponsored by Audi Bellevue)

Sep 2018 - Present

- Race in Pro/Category 1/Category 2 USA Cycling races in the Pacific Northwest and on the West Coast.
- Connect and engage with teammates, many of whom work at local companies including Microsoft, Amazon, and T-Mobile.

Husky Cycling Club, Admin/Officer

- Lead weekly group rides students and help foster a community of cycling enthusiasts with diverse backgrounds and interests.
- Help organize UW collegiate race weekend (permits, travel, housing)
- Spring race weekends with other PNW universities.

Machines Who Learn

Sep 2018 - Present

• UW reading group discussing ML and AI research papers.

CONTACT

- Web: <u>chaseking.me</u>
- Email: <u>chasek22@uw.edu</u>
- Github: <u>@chaseking</u>
- LinkedIn: <u>in/chase-king</u>
- Strava: <u>athletes/chaseking</u>

(References available upon request.)

EDUCATION

University of Washington

GPA: 3.95 / 4.0

Sep 2018 - Present Graduation expected June 2022

- B.S. CS (Paul G. Allen School of Computer Science & Engineering), with Departmental Honors
- B.S. ACMS (Applied & Computational Mathematical Sciences: Data Sciences & Statistics)
- Minor in Neural Computation and Engineering
- Relevant Coursework: Graduate Machine Learning, Graduate Computational Neuroscience, Graduate Algorithms, Honors Advanced Calculus, Probability, Neural Coding/Computation

WORK EXPERIENCE

Allen Institute — Research Intern, MindScope Jun 2021 - Present

- Designed algorithms to detect saccadic eye movements in experiment recordings, using statistical methods to quantify confidence
- Wrote tools to visualize salient eye movement information across trials
- Currently investigating the relationship between neural activity in the visual cortex and eye movements in mice
- Mentored by Saskia de Vries, Ph.D., Associate Investigator

Beewriter — Full Stack Engineer

- Deployed models using SOTA NLP and machine learning techniques to detect grammar mistakes and provide suggestions.
- Researched and experimented with novel model architectures to solve grammatical error correction (GEC) problems such as detecting comma splices
- Migrated backend to AWS Lambda, ensuring uptime & scalability.
- Implemented logging and tracking tools to monitor product usage and deployed an interactive dashboard to visualize various metrics.
- Redesigned website, making it responsive on mobile devices.

Marin Academy — Web Development Intern

- Created a front- and backend responsive web application for a campus communication system known as the daily bulletin.
- Built a touchscreen kiosk application and deployed digital signage

HuddleMC, LLC — Co-Founder, Lead Developer

2014 - 2016

2017 - 2018

- Designed backend architecture allowing for seamless cross-communication between multiple dedicated servers and dynamic node allocation (based on game demand).
- Developed a web panel for server status and management.
- Used profiling tools to improve free memory by over 40%.

Jan 2020 - Dec 2020