Owen Oertell

owenoertell.com | ojo2@cornell.edu | linkedin.com/in/owen-oertell | github.com/owen-oertell | +1 (404) 491-4223

EDUCATION

Cornell University

Ithaca, NY

BS in Computer Science, ECE, Minor in Mathematics

Expected Graduation: May 2025

Georgia Institute of Technology

Atlanta, GA

High School Dual Enrollment. GPA: 4.0.

Aug 2021 - May 2022

• Relevant Coursework: Linear Algebra, Multivariable Calculus, Differential Equations, Discrete Mathematics, Graduate Level Foundations of Machine Learning

Chamblee High School

Atlanta, GA

Salutatorian. ACT: 36/36. GPA: 4.6.

Aug 2018 - May 2022

• Relevent AP Scores: Computer Science A (5), Calculus BC (5), Chemistry (5), Statistics (5), Physics I (5), Biology (5)

Relevent Awards: National Merit Scholar, Keynote Lecturer
(Introduction to Machine Learning), Student of Distinction, 2nd Nationally TSA Software
Development, Top 25 Nationally TSA Data Science

EXPERIENCE

Lab Researcher May 2020 – Present

Dickson Lab, Georgia Institute of Technology · Internship

Atlanta, GA

- Adapted C code from bacterial genome to the human genome for novel copy number variation detection algorithm.
- Reduced memory consumption by 300GB while maintaining speed via parallelization and low-level programming in C.
- Worked on efficient blood assay technique; increased data gathering speed by 4x; paper nearing submission for publication.
- Utilities: C (Serial and Parallelized), OpenMP, OpenACC, Makefiles, OpenCV, Linux, Python, Valgrind

Head of Engineering, Secretary on Board of Directors

April 2020 – June 2022

Y STEM and Chess Inc 501(c)(3). Part-Time

Boise, ID

- Led development of website: <u>YStemAndChess.com</u> to provide free mentoring of underprivileged children from around the world.
- Helped expand Y STEM and Chess to tutor more than 800 children.
- Managed 30 undergraduate and professional SWEs.
- Engineered scalable architecture designs to minimize cost.
- Led development of real-time chess pairing and mentoring system.
- o Utilities: Node.js, PHP, Angular.js, MonogDB, Docker

PROJECTS

PrepByAI.com (Cofounder)

June 2021 – May 2022

- Led development of website: PrepByAI.com, a free ACT preparation site.
- Built a machine learning model to identify weakness and suggest questions to improve.
- Over 500 regular users and 9,000+ questions answered to date.
- Utilities: Flask, PostgreSQL, TensorFlow, React.js, JavaScript, Python

TECHNICAL SKILLS

Languages: C (OpenACC, OpenMP), C++, C#, Java, JavaScript, Python, Ruby, HTML/CSS, SQL

Frameworks: React.js, Angular.js, Node.js, Express.js, .NET core

Developer Tools: Jupyter Notebooks, Git, Docker, Kubernetes, VS Code, Amazon AWS, VIM, Makefiles

Libraries: Pandas, OpenCV, TensorFlow, Pillow, Numpy, Matplotlib, Valgrind

Databases: PostgreSQL, MongoDB

Interests

Language Skills: English (fluent), Spanish (limited working proficiency)

Interests: Mathematics (Pure and Applied), Thoretical Machine Learning, Computational Biology, Go (board game),

Philosophy, Golf