

Owen Oertell

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EDUCATION

Cornell University

Ithaca, NY

BS in Computer Science, ECE; Minor in Mathematics

Aug 2022 - Expected May 2025

Georgia Institute of Technology

Atlanta, GA

High School Full Time 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

- **Relevant AP Scores:** Computer Science A (5), Calculus BC (5), Chemistry (5), Statistics (5), Physics I (5), Biology (5)
- **Relevant Awards:** National Merit Scholar; Math Competition 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 · Part Time

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) · Internship

Boise, ID

- Led development of website: YStemAndChess.com 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.
- **Utilities:** Node.js, PHP, Angular.js, MongoDB, Docker

PROJECTS

PrepByAI.com (Cofounder)

June 2021 – May 2022

- Led development of website: PrepByAI.com, a free ACT preparation site.
- Built machine learning model to identify needs and suggest questions to improve performance.
- 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), Theoretical Machine Learning, Go (board game), Philosophy, Golf, Law,

Magic: The Gathering, Computational Biology