Cameron Angliss

774-571-0065 | cameronangliss99@gmail.com | LinkedIn | GitHub

Education

The University of Texas at Austin — Austin, TX
Master of Science - Computer Science — *Aug. 2023 – Present*

Connecticut College — New London, CT
Bachelor of Arts - Majors: Computer Science, Mathematics, Physics - GPA: 3.99 — *Aug. 2018 – May 2022*

- CS Courses: Data Structures, Algorithms, Computer Organization, Operating Systems, Robotics, AI, Honors Thesis
- Math Courses: Calculus I-IV, Linear Algebra, Real Analysis, Complex Analysis, Abstract Algebra, Topology
- Physics Courses: Classical Mechanics, Electromagnetic Theory, Quantum Mechanics, Experimental Physics

Experience

Software Engineer — June 2022 – July 2023
ThayerMahan, Inc — *Groton, CT*

- Developed major frontend repository to transform data in JSON format into plots to be analyzed by Navy employees
- Migrated 1000's of lines of JavaScript to TypeScript under Angular framework, reduced 5+ years worth of tech-debt
- Communicated with dozens of users to identify improvements to website layout and data visualization techniques

Math Help Center Tutor, Computer Science TA — Aug. 2019 – May 2022
Connecticut College's Academic Resource Center — *New London, CT*

- Tutored 8 math classes and 3 upper-level computer science classes (Algorithms, AI, Computational Intelligence)
- Determined student's knowledge level, identified areas of weakness, offered extra 1-on-1 help for struggling students
- Appointed as manager of MHC in junior year, scheduled tutoring sessions, provided mentorship to new math tutors

DevOps Engineer Intern — May 2021 – Aug. 2021
Nuance Communications, Inc — *Birmingham, MA*

- Selected for internship in elite cloud computing infrastructure team, noticed team's low security score of 20%
- Created pull requests on Docker and Kubernetes files and Python scripts, eliminated 20+ security vulnerabilities
- Fortified team's security score from 20% to 75%, braced team's infrastructure for the 2022 Microsoft acquisition

Projects

Cynthia: The Pokemon Showdown RL Agent | *Python, Pytorch* — Mar. 2023 – Present

- Coded a reinforcement learning agent that learns to play Pokemon battles on Pokemon Showdown website
- Implemented reinforcement learning with Expected SARSA algorithm, softmaxing over outputs to choose action
- Applied transformers architecture to improve over CNN architecture taking state-based inputs of battle state

Showdown Environment | *Python* — Mar. 2023 – Oct. 2023

- Constructed a reinforcement learning environment for agent training on the Pokemon Showdown website
- Built 3 main parts: a client-side websocket interface, a battle tracking component, data collection component
- Published the project on GitHub as open-source code for anybody to use or improve upon for their personal needs

Undergraduate Research in Genetic Algorithms and Robotics | *Haskell* — Aug. 2020 – Feb. 2023

- Conducted independent AI research with Professor Gary B. Parker through research seminars and honors studies
- Assembled 6 parallel genetic algorithms to evolve teams of neural network agents to generate optimal hexapod gaits
- Utilized math and physics knowledge to design efficient and accurate hexapod simulation for training
- Coauthored and published "Coevolving Hexapod Legs to Generate Tripod Legs" to ICAART 2023 conference

Technical Skills

Languages: Python/Mojo, Rust, Haskell, Java, JavaScript/TypeScript, HTML/CSS, Mathematica
Frameworks: Angular, Node.js
Developer Tools: Linux, Git, VSCode, Docker, Kubernetes, Azure DevOps, AWS
Libraries: Pytorch, NumPy, Matplotlib, pandas