CAMERON PLUME

Boston. MA

650-269-1029 • plume.c@northeastern.edu

EDUCATION

Northeastern University, Boston, MA   May 2025
Candidate for Bachelor of Sciences, Khoury College of Computer Sciences
- **Academic Record**: GPA 3.6/4, Dean's Scholar, 4 times Dean's List
- **Relevant Coursework**: Machine Learning and Data Mining 1, Object Oriented Design, Networks and Distributed Systems, Programming in C++, Algorithms and Data Structures, Database Design, Information Presentation and Visualization

TECHNICAL SKILLS

- **Programming Languages**: C++, Java, Python, SQL
- **Technologies**: Sci-Kit Learn, Kubernetes, Altair, Pandas, Tableau, TensorFlow, Digital Ocean, Git, AWS/EKS

EXPERIENCE

Technical Module Developer, *CS 1200, Northeastern University*   July 2023 – Present
- Currently collaborating with a group of 4 students and a dean to rewrite Northeastern University's CS freshman seminar.
- Individually writing two modules that will be completed by 900+ students, focused on entry level computer interaction and data visualization.

Consulting Coop, *Blueprint Talent Group, LLC*   July 2023 – Present
- Responsibilities include data analytics with an emphasis on principled data visualization for both team and client consumption.
- Conducting research for several different client facing projects in the technology space.

Head Teaching Assistant and Guest Lecturer, *Object Oriented Design, Northeastern University*   January 2023 – June 2023
- Designed and presented a 100-minute lecture on SOLID principles, specifically interface segregation, to 180+ students.
- Designed and presented two 50-minute lectures to introduce assignments for which I was a primary author.
- Cocreated a Kubernetes based grading environment integrated with GitHub Actions to process thousands of student projects.
- Managed a team of 7 teaching assistants during laboratory sections designed to deliver novel content to 60 students.
- Provided feedback on teaching assistant grading to standardize student evaluations.

Teaching Assistant, *Fundamentals of Computer Science, Northeastern University*   September 2022 – December 2022

PROJECTS

Battleship Server and Competition   May 2023 – June 2023
- Coauthored a 3-week sequence of 20+ hour programming assignments for 350+ students.
- Designed a custom variation of Battleship and provided project constraints encouraging good programming practices.
- Based on a custom network protocol, designed and implemented a server application capable of accepting and maintaining connections with thousands of student programs.
- Designed algorithms to maximize efficiency of server game model with an emphasis on low latency behavior.
- Made use of parallel computing architecture to run thousands of games concurrently and avoid queues.
- Culminated in two in-class tournaments, pairing 180 simultaneously executed student programs together and supporting games in a single elimination format until winners were determined.

Kubernetes Based Grading Architecture   April 2023 – June 2023
- Cocreated a GitHub based submission platform integrated with a cloud-based Kubernetes cluster capable of supporting thousands of weekly student submissions while dynamically allocating server resources to minimize computing costs.
- Led preliminary research focused on determining initial feasibility of project and previous applications of the Actions Runner System library.
- Engaged in weekly performance profiling to isolate optimal configurations of cluster to minimize student wait times.

INTERESTS

- Basketball, Sports Analytics, Skiing