Benjamin Wakefield

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Available July 2024 - December 2024

Education

Northeastern University, Boston, MA Khoury College of Computer Sciences Candidate for Bachelor of Science in Computer Science September 2022 – Present Expected May 2026 GPA 3.5/4.0

Coursework: Object Oriented Design, Algorithms and Data, Networks & Distributed Systems, Theory of Computation, Computer Systems, Foundations of Cybersecurity, Mathematics of Data Models

Pine Crest School, Fort Lauderdale, FL 48 AP Credits accepted by Northeastern

September 2018 – May 2022 GPA 4.2/4.0

Coursework: Data Structures & Algorithms, Artificial Intelligence, AP Computer Science A, AP Physics C Mechanics & Electromagnetism, AP Calculus AB & BC, AP Microeconomics & Macroeconomics

Skills

Java, C++, C, Python, Bash, HTML/CSS, Windows, Linux, MacOS

Projects

Simple Web Crawler

November 2023

- Programmed Web Crawler for class faux-social media site, traversing and parsing more than 10,000 HTML pages to find flags with depth-first search. Built a performance logging utility to measure server TTFB under strain.
- Used Java for implementation. Bash & Java for statistics collection. Python for statistics visualization.

Reliable Transport Protocol Implementation

October 2023

- Wrote a robust and efficient RTP implementation, ranking 1st out of 83 for efficiency and 3rd of 83 for transmission time by utilizing gzip compression and designing custom packet headers with low overhead.
- Used Java for implementation, Python for statistics visualization, and Bash for batch testing & statistics.

Testing Automation Script

September 2023

- Developed script to sequentially run all provided testing configurations and report summarized results, published script to student formed study group. The professor later improved his own testing utility to include such features.
- Bash script for professor's pre-existing Python testing utility. Built for Unix terminals.

Personal Website January 2024

- Built website from scratch, hosted on GitHub sites through Google Domains.
- Written in HTML, styled with standard CSS. Minor JavaScript usage.

3D Printed Ski Clip

January 2024

- Used AutoCAD to design and 3D print an ABS plastic ski clip, managed advertising partnerships.
- Prototyped in AutoCAD and Fusion360. Promotional Material made in Photoshop, Illustrator, and Vegas Pro.

Experience

Valet, SP+, Boston, MA

June - August 2023

- Handled guests' baggage, questions, special requests, and complaints.
- Managed efficient parking, safety, and logging of vehicle condition and location alone on night shift.

Interests

Skiing, Backpacking, Hiking, Photography, Graphic Design, Video Editing

Clubs

Northeastern Downhillers (Skiing), NUHOC (Hiking, Camping), Club Counter-Strike Team Captain (Spring 23 & 24)