SAMUEL BARTON
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EDUCATION

Dartmouth College, Hanover, NH   **Expected June 2025**
Bachelor of Arts, Major in Computer Science modified with Engineering Sciences, Physics Minor
Major GPA: 3.88/4.0; Cumulative GPA: 3.75/4.0
Relevant Coursework: Software Design & Implementation, Data Structures & Algorithms, Machine Learning, Discrete
Mathematics, Computer Architecture, Operating Systems, Microprocessors in Engineering Systems, Digital Electronics
Honors/Awards: College Honor List, URAD Scholar, Computer Science Learning Fellow + Teaching Assistant

Middlesex School, Concord, MA   **May 2021**
Honors/Awards: Graduated Magna Cum Laude; Harold Seligman, Jr. '72 Memorial Bowl for Community Service
Activities: Varsity Tennis; Varsity Soccer; Varsity Squash; Outdoors Club Head

PROFESSIONAL EXPERIENCE

Pegasystems, Inc., Cambridge, MA   **May 2024 – August 2024**
Software Engineering Summer Intern, Customer Decision Hub
- Integrated fully as a member within a full-time Scrum team focusing on data analytics tools for Pegasystems's hallmark individualized marketing software, Customer Decision Hub
- Implemented several UI features for the products quarterly release
- Fixed bugs with Apache Cassandra and PostgreSQL integration affecting multiple Fortune 100 clients
- Won global intern hackathon for innovative and effective internal application
- Skills: Java, Data Analytics, Apache Cassandra, PostgreSQL, Agile Development

ColdSnap, Corp., Billerica, MA   **April 2023 – June 2023**
Software Engineering Intern
- Identified a need within the company, and single-handedly developed a new system for acquiring customer data, increasing productivity within the commercial team, and making a lasting impact for the startup
- Improved and added features to a Windows application for visualizing test data analysis according to engineers' feedback
- Streamlined and automated patent status analysis for the company's president and IP lawyer
- Skills: Python, Git, Jira, MySQL, REST APIs

Dartmouth College, Hanover, NH   **March 2022 – February 2023**
Learning Fellow, Computer Science Department
- Received formal training and facilitated group problem solving sessions, led small group discussions, and served as Scrum Master for multiple project groups in various sprints throughout the term
- Collaborated with professors and program supervisor weekly in order to increase engagement, knowledge, and participation
- Trained a new generation of Learning Fellows across departments as a veteran member of the program
- Skills: Git, Scrum, C Programming, Software Design + Specifications, Leadership

PROJECTS

Yalnix, Unix-Based Operating System   **January – March 2024**
- Designed and implemented a fully functioning operating system kernel and user space with over 7000 lines of code
- Skills: Operating Systems, Multi-Threaded Programming, Process-Scheduling Algorithms

Tiny Search Engine, Search Engine in C   **February – March 2022**
- Implemented a general search engine architecture in C
- Skills: Software Design, Git, C Programming, Software Documentation

LEADERSHIP & SERVICE

Alpha Chi Alpha Fraternity, Hanover, NH   **March 2024 –**
Philanthropy Chair
- Communicated effectively with local organizations and led successful service events, prioritizing impact and participation
- Achieved ambitious goal of 100% participation within the fraternity with each member contributing to at least one service event in the 2024 Spring Term

SKILLS & INTERESTS

Programming Languages: C/C++, Java, Python, Rust, Javascript
Databases/Tools: MySQL, PostgreSQL, Apache Cassandra (NoSQL), Git, Docker, Kubernetes, Amazon EC2
Organizations: Club Tennis (Captain), Alpha Chi Alpha (Officer), TrustLab Cybersecurity Group
Hobbies: Golf, Backcountry Skiing, Flyfishing, Hiking the NH 4k-Footers