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OBJECTIVE: Ambitious computer science student seeking a software engineering summer internship or co-op

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## EDUCATION

**Washington University in St. Louis** | St. Louis, Missouri

Expected Graduation: 5/25

Bachelor of Science in Computer Science

GPA 3.98, Dean's List 5/5 semesters

Coursework: Rapid Prototype Development, Object-Oriented Development, Logic/Discrete Mathematics, AI, Data Science, Matrix, Statistics, Web Development, Computer Security, Quantum Computing, Computing Systems, Technical Writing

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## WORK EXPERIENCE

**Research Assistant**, Computer Security & Privacy Laboratory, Washington University in St. Louis 6/23-Present

- Developed a program for scanning epileptic-seizure-inducing frames based on the Web Content Accessibility Guidelines, and significantly reduced runtime by 56% compared to previous lab iterations utilizing C++ pthreads
- Implemented algorithms for automatic static analysis on app trackers with MobSF and dynamic traffic analysis with UI Monkey on women's health Android applications, identifying common privacy concerns and liabilities
- Parsed and extracted requested permissions from Android APK files and categorized them based on risk level

**Data Structures and Algorithms Teaching Assistant**, Washington University in St. Louis 1/23-Present

- Provide detailed assessment and feedback on assignments and projects, improving student mastery and results
- Facilitate student understanding of foundational data structures and algorithms with weekly help sessions

**Student Lead Technician**, Student Technology Services, Washington University in St. Louis 4/22-Present

- Provide comprehensive hands-on hardware and software support to over eight thousand undergraduate students
- Execute virus removal, data backups, OS troubleshooting, and bootcamps, leveraging Dell Tech certification

**Chemical Engineering Research Assistant**, Singapore Institute of Food and Biotechnology Innovation 5/22-8/22

- Designed and tested impellers to withstand high viscosity fluids in bioreactors using AutoCAD and 3D printing
  - Conducted experiments and data analysis of lipid production in single cell protein from various waste streams
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## PROJECTS

**Personality Quiz Website** 12/23

- Designed a personality quiz website integrating React for an interactive user experience and quiz visualization
- Leveraged Node.js and Express, integrating RESTful APIs for efficient communication with the database

**Calendar Website** 10/23

- Developed a dynamic calendar website enabling users to create accounts, securely log in and manage personalized events on their monthly calendar utilizing HTML and JavaScript for the frontend user interaction
- Implemented backend functionalities using PHP and MySQL database to store user information and event data
- Engineered a robust event categorization system allowing users to seamlessly navigate and query events

**Linux Command Prompt File System** 5/23

- Engineered a software simulation of a file system complemented by a user-friendly command prompt interface, facilitating seamless interaction between the user and the contained files using C++
- Implemented ls, rm, touch, cat, ds, cp, and rn commands, seamlessly executed to mimic Linux command prompt

**Price Prediction Model for Uber and Lyft Rides** 3/23

- Thoroughly analyzed a dataset of over 700,000 data points to investigate the correlation between rideshare prices and a variety of factors such as distance, time, temperature for Uber and Lyft rides with sklearn package
  - Developed a robust price prediction model that achieved a 70% accuracy rate of predicting prices within 10%
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## COMPUTER SKILLS

Python, C/C++, HTML/CSS, JavaScript, Java, React.js, Node.js, Express, Amazon AWS, MySQL, PostgreSQL, AVR

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## LEADERSHIP

**Team Lead**, Engineering without Borders 9/21-Present

- Manage a team of engineers to design and oversee the implementation of an irrigation and water storage system
- Engage with and educate the local Jinja community to ensure regular maintenance of constructed system

**Senior Tutor**, HiScore Learning and Singapore Math's Club 9/20-Present

- Develop exam material testing nonverbal reasoning that increased students' exam scores an average of 13%
- Head a team of two to three teachers to instruct 30+ students on fundamental English and Math concepts