ELYSIA QUAH | elysiaquah@gmail.com | (425) 802–4074 | https://www.linkedin.com/in/elysiaquah/

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, Parallel and Concurrent Programming

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WORK EXPERIENCE

Frontend Developer and Founding Member, Connect   12/23-Present
- Designed and implemented crucial pages on Connect using TypeScript and Tailwind CSS for a better user experience
- Managed a team of 3 developers and directed the improvement of Connect's website design and usability, securing continued support from the founder of Build-A-Bear and gaining additional funding for further development

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 MySQL database

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%

COMPUTER SKILLS

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

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