Yule Zhang

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EDUCATION

University of California San Diego

Master of Science, Computer Science

Sep 2024 San Diego, CA

George Mason University
Bachelor of Science, Computer Science - GPA - 3.57

Aug 2018 – Dec 2022

Minor in Software Engineering - GPA - 3.89

Institutional Honors: Cum Laude

Fairfax, VA

SKILLS

Proficient: Python(5 years), Java(5 years with Junit and SpringBoot)

Intermediate: JavaScript(Node.JS and React), Angular, C, HTML5, CSS, JSON

Exposure: Assembly, Common Lisp, R, MATLAB, LaTeX, C++, C#, Go

Databases: MySQL, MongoDB, Oracle Database

Technologies: PowerShell, Linux, Maven, Git, AWS Cloud, GCP, VIM, Eclipse, VSCode, Docker

WORK EXPERIENCE

 $\mathrm{Aug}\ 2022-\mathrm{May}\ 2024$

Software Engineer Coop | Java, Linux, GCP, Maven, Junit-Mokito, Spring Boot, Git

Timonium, MD

- Report Generation: Recorded and monitored user flow and applications activities, handling over 1 billion daily calls.
- Logging Dashboard: Built GCP and Grafana Loki dashboards used to display performance metrics for services, including registration, log-in, email verification, and more, enabling engineers to be more efficient in debugging jobs and management analytics.
- Implemented new program features, resolved software bugs, and wrote Junit test cases for backend services-related APIs to ensure software quality.
- Collaborated in a multinational team of 11, conveying complex ideas and ensuring the timely completion of tasks

George Mason University Dr.Wing Lam's Lab

June 2023 – Jan 2024

Research Assistant | Java, Linux, Maven, Git

Fairfax, VA

- Reviewed around 30 papers for runtime prediction and code coverage literature review, used for paper reference and abstract.
- Found the root cause of order-dependent flaky tests for more than 5 projects by manually analyzing project codebases and dynamic invariants.
- Extracted features of auto-find patch software for fixing flaky tests from iFixFlakies and iDFlakies, developed by Dr.Lam and others.

George Mason University Research Internship

Summer 2022

Software Development Intern | AWS, Python, Angular

Fairfax, VA

- Data Automation: Generated script and utilized natural language processing to translate audio content to text to extract data using AWS.
- Web-based Digital Archive: Developed a program to enable users to search, display, and view library documents that facilitated human-computer interaction and computational archival science with improved software usability.
- RESTful API: Designed RESTful APIs to fetch and filter historical data from the database, allowing asynchronous data pre-processing that improved website responsiveness by nearly 3 minutes.
- Performance: Optimized data-loading performance by 80% with cache system.

Research Assistant | Python, computer vision

Fairfax, VA

- Data Collection: Manually collected and annotated over 1000 sources of high-quality data to train and validate the research model to improve the model detection accuracy by 30%.
- Research Implementation: Worked on the research project that handles automatic detection of mobile UI changes to improve UI design choices with better software usability.

George Mason University

Spring, Fall 2021

Undergraduate Teaching Assistant

Fairfax, VA

- Assisted Graduate Teaching Assistants during labs, maintaining classrooms for Java and Python courses.
- Performed testing and review of class assignments, ensuring quality documentation.
- Provided technology support in classes, providing consistent guidance to over 200 students.

PUBLICATIONS

- S. Sabiha, M. Hasan, Z. Yule, and M. Kevin, "GUIEvo: Automated Evolution of Mobile Application GUIs", In proceedings of the 21st International Conference on Mining Software Repositories (MSR 2024)
- Submitted Work: Takuan: Finding the Root Cause of Order-Dependent Flaky

PROJECTS

Movie Review Classifier

• A movie review classifier using the KNN algorithm to predict positive/negative sentiment on movie reviews outperforming other students with an accuracy of 86%.

Connect Four Game-Playing Agent

• Implemented a game agent to search game states and predict the ideal moving scores for players using the Min-Max Algorithm.

Miscellaneous Experience

Awards and Volunteering

- Real Talk: U.S Job/Internship Search for International Students Panelist, George Mason University Career Services
- Cloud Innovation Conference Ambassador, TechConnect DC
- Fall 2018 Fall 2019 and Fall 2020 Dean's List Honor George Mason University
- Mason Freedom Scholarship Four-year scholarship awarded for academic excellence at George Mason University - \$28,000
- Tapia Conference Scholarship awarded at UC San Diego GradWIC

Certifications

- Oracle Certified Associate, Java SE 8 Programmer. Awarded by Oracle.
- Java Foundation Certified Junior Associate. Awarded by Oracle.