Yu Xi Gui

425-229-9226 | yuxigui1@berkeley.edu | yuxigui.github.io | github.com/yuxigui

Education

University of California, Berkeley Expected: Fall 2022

Bachelor of Arts in Computer Science

Relevant Coursework: Algorithms, Data Structures, Databases, Operation Systems, Security, Data Science, Artificial Intelligence, Machine Learning, Internet Architecture and Protocols, Compilers, Machine Structures, Linear Algebra, Multi-variable Calculus, Computer Programs, Information Devices, Random Processes, Discrete Mathematics and Probability Theory

Experience

Hulu May 2022 - August 2022

Software Developer Intern *Santa Monica, CA*

- Constructed an UI wrapper that facilitates the exploration of micro-services, saving engineers time for inspecting and debugging the servers with different protocols
- Integrated API calls with UI using Flask and JavaScript and displayed transactions of servers on an intuitive UI with AngularJS

UC Berkeley Undergraduate Research Apprentice Program January 2022 - May 2022

Software Developer *Berkeley, CA*

- Implementing new features for a social justice hacking game such as levels, game mechanics, UI/UX design, and scoring utilizing the Python's RenPy framework and JavaScript's Monogatari framework
- Developing game focused on flow, source code readability, user testing
- Prioritizing, delegating, and setting deadlines for project deliverable

Hulu May 2021 – August 2021

Software Developer Intern *Santa Monica, CA*

- Developed, tested, deployed a full-stack group management service platform using Java with Spring, iBATIS, and Swagger framework to facilitate the creation and organization of users into different groups
- Implemented RESTful web service APIs and object-oriented classes to include efficient SQL queries
- Connected code with provisioned AWS Aurora database using MySQL and Terraform

UC Berkeley EECS Department September 2021 – December 2021

Designing Information Devices and Systems II Tutor *Berkeley, CA*

- Helped answering questions and teaching topics in weekly discussions sections for course EECS 16B: Designing Information Devices and Systems II
- Contributed to discussion worksheets, notes, and exam grading for course topics, including signal processing, circuits, controls, introductory machine learning, Python

Projects

Simple Git | *Java*

- Implemented a Java version-control system with tree and hash table data structures that mimicked the real Git
- Included basic commands like init, add, commit, branch, checkout, merge, and remote
- Generated various test cases to ensure functionality of the program

Machine Learning Projects | *Python*

- Implemented various machine learning algorithms, including GDA, QDA, Stochastic Gradient Descent, AdaBoost, Gradient Boosted Random Forest on datasets, including SPAM, MNIST, CIFAR-10, Titanic and achieving $\geq 80\%$ accuracy
- Implemented full-connected neural networks including ReLU, backdrop, and convolutional layers

Technical Skills

Languages: Java, Python, C, JavaScript, SQL, HTML/CSS, Scala, RISC-V Assembly, Scheme, R
Frameworks: Spring, Spring Boot, Swagger, Flask, iBATIS
Developer Tools: Git, Intellij, Postman, MySQL, VS Code, Eclipse, Jupyter Notebook, Docker, Maven, AWS, Terraform, Google Cloud, Hive, Google Colab Notebook
Libraries: Pandas, React, Material-UI, NumPy, Matplotlib, Sklearn, Seaborn, TensorFlow