Reshmasai Malleedi

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Grace Hopper Celebration v2021, 2022

EDUCATION

University of North Carolina at Chapel Hill | Chapel Hill, NC   Graduation May 2023
B.S. Computer Science, B.A. Mathematics, Data Science Minor   GPA: 3.87/4.00
Coursework: Data Structures, Algorithms, Object-Oriented Programming, Systems of Programming, Introduction to Web Development, Models of Languages and Computation, Linear Algebra, Discrete Mathematics, Differential Equations

EXPERIENCE

Software & Data Engineer Intern, *Wells Fargo*   *June 2022 – Aug 2022*
- Worked on **data ingestion** (from **APIs** and databases) and curation using **ETL** tools, SQL, and Apache Hadoop.
- Developed API based applications/scripts to support Tableau operations.
- Gained practical experience in building ETL solutions, data analysis and visualization, and **shell script programming**.
- Built interactive **BI dashboards**.
- Used Data Control Integration (**DCI**) concepts to load raw and sanitized data.

Research Assistant, *Yan Research Lab*   *Dec 2020 – Aug 2021*
- Worked alongside PhD students to rewrite a LabVIEW program based on real-time particle tracking to incorporate **machine learning models**; python-based.
- Explored deep learning models (**convolutional neural networks**) for particle tracking reconstruction.
- Assisted in developing **control systems** in the optics lab by coding presets for different shaped holograms used in nanoparticle trapping.
- Manipulated code to **test** phase and intensity modulations in performance against optical trapping methods.

PROJECTS

SafeEats Mobile Food Delivery Application | *XCode, React, Figma, Python*   *August 2022*
- Created an UberEats related mobile food delivery application for a client fully functional and linked to Google Maps API for location services and and Yelp API for restaurant reviews and contact information.

Personal Website | *HTML, CSS, JS*   *July 2022*
- Created personal website using HTML, CSS, JavaScript from scratch.

Akari Game | *Java*   *April 2022*
- Recreated the Japanese children's game *Akari* with a **GUI** that allowed players to interactively play multiple different puzzle boards.
- Implemented the algorithm behind the game using **JavaFX** and the **MVC** framework.

Intrusion Detection Filter | *R, Jupyter Notebook*   *December 2021*
- Used R to analyze and model a simulated Local Area Network dataset from Lincoln Labs at MIT.
- Utilized **statistical machine learning** methods and algorithms (**decision trees, k-means clustering, naïve bayes**) to develop an intrusion detection filter with **99.67% training accuracy** on the test set.

LEADERSHIP

Undergraduate Teaching Assistant, *UNC Mathematics Department*   *Jan 2021 – Dec 2021*
- Assisted live lectures for Calculus 1 and **Linear Algebra**; answered students' questions in real-time.
- Held open office hours on a weekly basis and **hosted review sessions** before midterms and finals.
- Developed **leadership** skills by working with professors and other teaching assistants in creating and syncing the curriculum to offer the best help for students.

SKILLS & TECHNICAL TOOLS

Languages: Java, Python, SQL, TypeScript, C, HTML/CSS, JavaScript, R
Technologies: UNIX/shell script, Git, Apache Hadoop, pandas, NumPy, Scikit-learn, Tableau, Jupyter Notebook, LabVIEW, MATLAB, PuTTY, Docker