FREDERICK WANG

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gitfreds.github.io

EDUCATION

Rice University – B.S., Computer Science   **Aug 2017 – May 2021**
GPA: 3.4/4.0

SKILLS

- Python, Java, SQL, C, R, JavaScript, HTML, CSS, React
- Git, MongoDB, Neo4j, Spark, Hadoop, TensorFlow, AWS, Unix, Flask

EXPERIENCE

Software Engineering Intern – *Lutron Electronics, Inc.*   **Summer 2020**
- Program cancelled due to COVID-19

Software Developer Intern – *Polytronix, Inc.*   **Jul 2018 – Dec 2018**
- Designed and developed internal Java application to automate product bid search
- Tripled daily biddable product pool by replacing 4 hours of daily manual work

Data Science Intern – *VinStar Big Data*   **May 2018 – Jul 2018**
- Designed Python and SQL program with modified Levenshtein Distance to group nonstandard descriptions
- 90% accurate categorization, assisting with urban development

Research Assistant – *Computational and Neuropsychology Simulation Lab at UNT*   **Feb 2016 – May 2017**
- Redesigned test process and advocated for digital data entry process to double testing capacity
- Investigated subcortical circuits and neurocognitive illnesses with Dr. Thomas Parsons, Ph.D.

Teaching Assistant (Parallel Programming) – *Rice University Computer Science*   **Jan 2021 – Current**
- Coordinate with teaching staff and other TAs to facilitate discussion of course material
- Host weekly office hours to teach concepts and assist with programming assignments

PROJECTS

Genius Lyrics, Artist Only!
- Python-Flask + Genius Lyrics API web app to view only the artist's explanations of their own song lyrics

Inventory Managing and Invoicing Application
- Inventory management and invoice creation application using MongoDB, Express, React, Node.js

Document Classification Projects
- Recurrent and feed-forward networks with TensorFlow to identify text's document with 85% accuracy
- k-NN classifier with Python and Spark to categorize documents with 90% accuracy

"Looking For Group" Discord Bot
- Designed and developed a Discord bot with the Discord-Python API, allowing users to create temporary activity groups with custom notifications
- Serves over 100 users, shortening wait times by several hours

Kernel and File System
- Kernel from scratch for yalnix in C with virtual memory management, context switching, and fork support
- File system from scratch for yalnix in C with read, write, seek, and hard link functionality

Data Entry Automation – Rice University
- Streamlined data entry for thousands of new students with Python

LEADERSHIP

Orientation Week Coordinator – *Rice University*   **Dec 2018 – Sep 2019**
- Planned and created Rice O-Week 2019, interviewed and led over 200 student leaders
- Prepared and executed 12 full days of events with a cohesive theme and mission statement to assist freshman transition through academic planning, resource showcases, social events.
- Delegated tasks with university offices to host campus-wide events, showcasing campus resources