YI RONG

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github.com/yrong10

EDUCATION

Stevens Institute of Technology, Hoboken, NJ **Expected May 2022**
Master of Science in Applied Artificial Intelligence
The Cooper Union for the Advancement of Science and Art, New York, NY **May 2020**
Bachelor of Engineering in Electrical Engineering and Minor in Computer Science

SKILLS

Programming Languages: Python, Java, JavaScript, HTML, CSS, SQL, MATLAB
Frameworks: Flask, Express.js, React, Redux, Scikit-learn, Open-CV, Bokeh

EXPERIENCE

The National Astronomical Observatories of the Chinese Academy of Sciences (NAOC), Beijing, China
Neutron Star Group Intern **Jun. 2016 - Aug. 2016**

- Utilized practical skills to process and analyze neutron star data to detect anomalies using MATLAB
- Compiled over 1000 lines of code in MATLAB to create audio files based on pulsar star data
- Collaborated with team to design different audio filters in MATLAB to produce better quality audio files
- Created the first pulsar sounds audio files on the NAOC official website

TECHNICAL PROJECTS

Flask Expense Tracker Website (github.com/yrong10/flaskexpense**)** **Summer 2020**

- Implemented an expense tracking website with Python, Flask, PostgreSQL/SQLAlchemy, Semantic UI
- Developed MVC backend with Flask on PostgreSQL with SQLAlchemy
- Created features that include interactive visualization based on input data using Bokeh library

Full Stack Amazon Price Tracker (github.com/yrong10/amazon-price-tracker**)** **Summer 2020**

- Implemented the web service with JavaScript, Node, Express, MongoDB/Mongoose, React for real-time amazon price tracking
- Designed the Ajax based frontend with ReactJS, Semantic-UI, and Redux for middleware and reducers
- Developed MVC backend with Express on MongoDB with Mongoose
- Achieved features that include scheduled web scraping using NodeJS libraries

Android Infant Monitoring App **Fall 2019 - Spring 2020**

- Collaborated with team members to build an Android baby monitor app
- Engineered a hardware system to perform noise and motion check using Raspberry Pi and OpenCV
- Implemented an Android app with React-Native to interact with the hardware and display real-time video feed
- Designed a backend API with Flask and AWS on Raspberry Pi to control the hardware

Bias Investigation in CEO Data **Spring 2019**

- Investigated and identified bias towards ex-prisoner opportunities to be hired utilizing the dataset given by Center for Employment Opportunities (CEO) and machine learning models
- Collaborated with team members to optimize the way CEO view and understand data by implementing data visualization which improved usability by 50%

UDP based Reliable Data Transfer 3.0 Simulation **Spring 2018**

- Created a Python UDP channel simulator which can drop, randomize, and swap order on packets
- Designed and implemented a reliable data transfer model based on the RDT 3.0 model using finite state machine combined with timeout on sender and receiver