

JONATHAN WANG

Software Engineer

CONTACT

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EDUCATION

RUTGERS UNIVERSITY - NB

B.S. | M.S. IN COMPUTER SCIENCE - 2022 | 2024

GPA: 3.9 | 4.0

Relevant B.S. Courses:

- Data Structures/Algorithms
- Computer Architecture
- Systems Programming
- Operating System Design
- Data Science
- Software Methodology/Engineering
- Databases
- Internet Technology

Relevant M.S. Courses:

- Operating System Theory
- Programming Languages and Compilers

SKILLS

Programming Languages:

Python, HTML, CSS, JavaScript, Java, SQL, C, C#, R, MATLAB, Bash

Frameworks/APIs:

Bootstrap, ReactJS, React Native, Flask, REST, TensorFlow, Keras, Dash

Tools:

MongoDB, AWS, Google Firebase, MySQL, Git, Jira, Unity

EXPERIENCE

AMAZON FIREOS ARCHITECTURE TEAM

SOFTWARE ENGINEERING INTERN | SUMMER 2021/2022

- Developed a visualization tool for FireOS dependencies that will save Amazon and FireOS devs resources when making changes to the OS architecture or individual modules
- Explored the **Android Build System**, developed build modules parsing scripts for gathering data from the FireOS build tree, integrated with **FireOS feature mapping tool** to automate data collection, and developed data visualization application with **Flask**, **Dash**, and **Vis.js**
- Wrote extensive API documentation and unit tests to allow for further scoping

RUTGERS CENTER OF ALCOHOL AND SUBSTANCE USE STUDIES

RESEARCH ASSISTANT | WINTER 2019 - SPRING 2021

- Designed and compared machine learning models that utilized **XGBoost**, **random decision forests**, and **Tensorflow neural networks** with automated Bayesian hyperparameter optimization to give researchers insight into the contributing factors of substance abuse on brain development from MRI data.
- Developed machine learning interpretation method in R Studio utilizing variable importance plots, local interpretable model-agnostic explanations, and partial dependence plots

RUTGERS WIRELESS INFORMATION NETWORK LABORATORY

RESEARCH INTERN | SUMMER 2018

- Research on wireless signals for mapping indoor environments
- Engineered a real time data collection method integrating machine learning processing to gather data transferred by wireless signal transmitters, which granted researchers access to data needed for analysis

PROJECTS

RKM - RECIPE SHARING SOCIAL MEDIA APPLICATION

SOFTWARE ENGINEERING FINAL PROJECT | SPRING 2022

- Lead designer and product owner for a team of 5 to build a mobile social media application for professional and amateur chefs to share recipes
- Developed frontend mobile application using **React Native** communicating via **REST API** with a backend python **Flask** server connected to a **MongoDB** database

RUCONNECT - MARKETPLACE APPLICATION

HACKATHON PROJECT | FALL 2020

- Led a team of 4 to build an e-commerce website that allows students within a college community to sell and trade college related items.
- Developed frontend web application with **ReactJS** and backend application database with **MongoDB** to store user data, manage listings, and log sales.