Jeffrey Yang

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EDUCATION

Rutgers University – New Brunswick *Class of 2023*
B.S. in Computer Science, B.A. in Economics, Minor in Mathematics **GPA: 3.91**
Coursework: Data Structures, Computer Architecture, Systems Programming, Algorithms, Software Methodology, Data Science, Artificial Intelligence, Multivariable Calculus, Linear Algebra

EXPERIENCE

Amazon ACM Persistence, *SDE Intern* *Jun 2022– Aug 2022*
- Created database backfill tool to preserve backwards compatibility with rest of downstream services as part of campaign to move to a NoSQL architecture using DynamoDB
- Ensured data hygiene during backfill jobs by enforcing data type and formatting rules of deprecated SQL database within write operations of backfill service
- Designed and deployed service pipeline using various AWS services to queue, track, and log backfill jobs

Amazon AWS Edge, *SDE Intern* *Jun 2021– Aug 2021*
- Created traffic load generator to performance test a DNS API and determine system limits
- Designed and implemented a standardized test procedure to assess a variety of host fleet hardware configurations
- Automated performance test by creating an approval workflow in the deployment pipeline in order to check for performance degradations in each deployment

Rutgers Research Project, *Undergraduate Student Programmer* *Jun 2020 – Aug 2020*
- Worked with a research project team and public transportation company to create a mobile app that allows users to track and interact with an autonomous transit system
- Designed and created application front end using React Native and implemented map functionality with Google Maps API
- Used OpenTripPlanner and MongoDB to create a data pipeline to restructure and organize raw transit data to be displayed to users in the front end of the application

Intelligent Visual Interfaces Lab, *Undergraduate Research Assistant* *Jan 2020 – Jun 2020*
- Created 3D traffic model in Unity with autonomous driver agents that interact with traffic lights and other driver agents to simulate driver behavior
- Designed and implemented behavior tree for the autonomous agents to handle different traffic scenarios
- Created perception system that analyzes an agent's surroundings and calculates the data to pass into the behavior tree

Rutgers AIAA RUAutonomous Team, *Imaging Team Lead* *Sep 2019 – May 2022*
- Led a team of 5 to program imaging related tasks on a drone for the annual AUVSI SUAS competition
- Implemented multi-thread system to synchronize image collection and telemetry reporting, which improved data reporting accuracy and image localization
- Trained object detection model with the Tensorflow object detection API and designed a color classifier with OpenCV to locate and classify mission targets on the ground during flight

PROJECTS

HackRU Fall 2020
- Led a team of 4 to build an e-commerce website that allows students within a college community to sell college related items such as used textbooks and housing
- Designed and deployed site frontend with React and deployed web API to communicate with backend database

PennApps XVIII Hackathon: Airtunes
- Created Python program with a team of 4 that uses computer vision to read body motions and emit audio effects to create an augmented dancing experience
- Trained neural net for body posture classification with Tensorflow and used OpenCV to segment images into different body parts

SKILLS

Programming: Python, Java, C, C#, Javascript, HTML, CSS, MongoDB, Node.js, React.js, React Native, Tensorflow, Git, UNIX
Software: Unity, Android Studio, Figma, Adobe Photoshop, Adobe Illustrator