Jeffrey Yang

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EDUCATION

West Windsor-Plainsboro High School North *Sep 2015 – Jun 2019*
GPA: 4.75 / 5.00

Rutgers University – New Brunswick *Class of 2023*
B.S., Computer Science
GPA: 4.00/4.00
Coursework: Multivariable Calculus, Linear Algebra, Discrete Mathematics, Statistics, Data Structures, Computer Architecture, Software Methodology, Microeconomics, Macroeconomics

EXPERIENCE

Rutgers Research Project, *Part-time Undergraduate Programmer* *Jun 2020 – Present*
- 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
- Created application front end using React Native and used Google Maps API, OpenTripPlanner, and MongoDB backend to create a client-side data management system
- Designed data framework to restructure the GTFS transit data format and efficiently search and access data from a network of class structures

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
- Designed and implemented behavior tree 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 Member* *Sep 2019 – Present*
- Use computer vision and machine learning to achieve drone autonomy
- Collaborating with a 7-person team to improve data reporting accuracy by synchronizing image collection and telemetry reporting using an Arduino
- Optimize data communication protocols between drone and ground server

NYU CREATE Lab, *Design Lead* *Aug 2019 – Sep 2019*
- Lead a 3-person team to design a 2D platform game in Javascript
- Wrote storyline, designed characters and maps, programmed game engine
- Contacted professional game developers to receive and incorporate feedback

PROJECTS

PennApps XVIII Hackathon: Airtunes
- Created Python program with a team of 4 that outputs audio responses to specific body motions to enhance dancing experience
- Trained neural net for image classification with Tensorflow and OpenCV and created user interface

Javascript video games
- Created three multi-level 2D roguelike fantasy games with Javascript using Phaser 3 library, with maps created using Tiled editor

Rain Alert app
- Created Android app that sends daily automated rain reports
- Analyzed weather data received from Accuweather API to generate warnings about various weather events

Calculator program
- Created scientific calculator program with graphical interface in Java using JFrame components that uses postfix expressions to perform calculations

SKILLS

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