Ryan J. Li

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EDUCATION

Georgia Institute of Technology, Atlanta, GA *August 2017 - May 2021 (Expected)*

- Pursing a Bachelor's in Computer Science, Concentration: Intelligence + Information Internetworks, 4.0/4.0 GPA
- Classes Taken/*Taking*: Artificial Intelligence, Computer Organization and Programming, Objects and Design, Data Structures, *Game AI, Database Systems, Computer Vision, Robotics and Perceptions, Systems and Networks*

SKILLS

- **PROGRAMMING:** Java, C#, Python, C++, C, SQL, Go, Git, JavaScript, MATLAB, jQuery, Node.js, HTML/CSS
- **INSTRUMENTATION:** Docker, InfluxDB, Ngnix, Grafana, Jenkins, Ranorex, Unity, Visual Studio, Windows, Linux
- **LANGUAGES:** English(native), Cantonese(native), Mandarin**(**intermediate), Spanish(intermediate)
- **CURRENT ORG.:** Solar Racing at GT, Outdoor Recreation at GT, Smash Jackets
- **HONOR SOCIETIES:** Tau Beta Pi, Gamma Beta Pi

EXPERIENCE

GT SOLAR RACING | Telemetry Member *January 2018 to Present*

- Implementing a GATT protocol system to use Bluetooth with our sensors to our Arduino device
- Improved telemetry server in **Go** that communicates to **InfluxDB** with containerization with **Docker** by separating the main API handler interfaces into classes which return the request for that handler
- Modified Parser for TCP script to ensure data transferred is not corrupted

NCR | SOLUTIONS INTEGRATION AND TESTING INTERN Atlanta, GA | *May 2019 to August 2019*

- Constructed a CI/CD Pipeline for running nightly tests in Jenkins with Zephyr as a test management platform
- Wrote automated tests in Visual Studio using **C#** and **Selenium WebDriver** for web and desktop apps
- Utilized **Python** to create a web scraper and created an Android application written in Java that gives recommendations for food items and recipes using **Google Vision AI**

BST GLOBAL | QA AUTOMATION INTERN Tampa, FL | *May 2018 to August 2018*

- Automated testing for the BST client app using Ranorex and **C#** with **SQL** database to create different testing scenarios
- Implemented an Auto Updater feature and Reported and fixed bugs through Jenkins
- Developed an application to discover 700+ unused automation recording files

PROJECTS

ARTIFICIAL INTELLIGENCE / MACHINE LEARNING

- Analyzed different pathfinding algorithms for an AI in **Python** to move around a closed, stochastic, and dynamic environment with nav meshes, expanded geometries, and flocking and swarming behaviors
- Coded an image classification algorithm that takes in a training set of images (6 different categories), performs a histogram of the gradients, and predicts a test set of images at around a 95% accuracy using **Python**

APPLICATIONS

- Recreated Wolfenstein 3-D movement in the terminal using **C++**, incorporating frame smoothing and ray casting for the perception of depth; Mapped a 2-D grid to appear as a 3-D environment
- Coded a Tetris game in **C** utilizing a Finite State Machine and Dynamic Memory Allocation; Considered screen buffering, input delay, and load management
- Designed and wrote a Space Trader app for Android written in **Java** with Gradle for building dependencies; Included save states, dynamic shop and world creation, and special events to occur
- **HackGT**: Created a platformer controlled by Muscle Movement using **Lua**, **Java**, **JavaFX,** and a Myo Armband

WEB DEVELOPMENT

- Created a small Chat Room with real time updates using **jQuery, MongoDB, and Postman**
- Coded and Designed interactive personal website without any frameworks with **HTML, CSS, JavaScript, and jQuery**: http://www.prism.gatech.edu/~rli342/

LEADERSHIP

Outdoor Recreation at GT | INSTRUCTOR IN TRAINING

- Taught and ensured security of a total of over 30 students for outdoor rock climbing
- Led 20+ Chinese students in a weekend outdoor camping trip in a Shenzhen-Atlanta Program