Shen (Caden) Jiang

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EDUCATION:

Georgia Institute of Technology, Atlanta, GA **Aug 2015 – May 2019**

- Bachelor of Science in Computer Science Cumulative GPA 3.69 (Dean's List 2016, Faculty Honors 2017)
- Concentration in Intelligence and Media
- Barcelona Summer Program at Universitat Politècnica de Catalunya (Summer 2016)

Hwa Chong Institution, Singapore **Jan 2007 – Dec 2012**

- Singapore Mathematical Olympiad: Bronze (2009)

SKILLS:

Languages: Java, C#, Python, JavaScript, CSS, HTML, SQL, C, Objective-C
Systems/Tools: Android Studio, Visual Studio, Unity, Git, D3.js, Firebase, Processing, HoloLens, Matlab, Xcode
Communication: Chinese (Read and Write), French (Read), Spanish (Read)

EXPERIENCE:

Microsoft, Maps & Geospatial **Jun 2019 – Present**

Software Engineer

- Develop an SDK for the popular Unity game engine that provides the ability to visualize a 3D map component that streams and renders 3D cities and terrains with worldwide coverage.
- The SDK is optimized for Mixed Reality applications and can be deployed to devices such as HoloLens and Oculus Rift.

Microsoft, AI & Research, Cortana @ Work and Bing Maps **May 2018 – July 2018**

Software Engineer Intern

- Extract and process large amounts of unstructured map data, filter noise and use machine learning techniques to automatically categorize them. Streamlined workflow and vastly reduced human processing efforts at data acquisition.
- Understand entity relations between linked datasets and use that information to train a model that helps in automatic address parsing and generation. The model can also be modified to apply to other important map attributes.
- Render 3D road information from map data, aid in visual interactive editing of map entities.

ThyssenKrupp Elevator Americas, Research Innovation Center Atlanta **Jan 2017 – Apr 2017**

Computer Science Intern

- Develop rich Augmented Reality applications with Microsoft HoloLens using HoloLens SDK on Unity.
- Model maps and terrain information onto holograms with gesture control.
- Create shared holograms experiences with real-time gaze, touch feedback and voice command activation.

RESEARCH:

Georgia Institute of Technology, Engineered Biosystems **Aug 2018 – May 2019**

Undergraduate Research Assistant

- Create interactive data visualization in D3 for millions of video frame data to better analyze worm behavior.

Georgia Institute of Technology, Engineered Biosystems **Sep 2017 – Jul 2018**

Undergraduate Research Assistant

- Develop crowdsourced Android annotation application to identify and better characterize the structure and behavior of c. elegans "eigenworms". Manage through Firebase a large database of sources images and user drawings.
- Published to the Google Play Store as "Wurm Paint" to reach a larger audience.
- Research Paper: https://www.future-science.com/doi/pdf/10.2144/btn-2019-0010

Georgia Institute of Technology, School of Interactive Computing **Sep 2016 – Feb 2017**

Undergraduate Research Assistant – Center for Accessible Technology in Sign

- Create a web game incorporating contextual sign language for deaf children to learn and improve.

PROJECTS:

AirPnP, Linode Sponsor Honorable Mention – PennApps 2016 **Sep 2016**

Connecting private parking spaces with eager drivers

- Develop Android based crowdsourcing platform with a clean map interface for searching available parking spaces nearby.
- Hosted user map database with MongoDB and executed through Linode servers before sending back to Android device.
- Connect using Capital One's Nessie API for instant user payment and Nexmo API to push SMS notifications.

Places Now, Devpost Staff Pick – HackGT@UPC Barcelona 2016 **Jul 2016**

Find better, more updated information about places through a merger of Google Maps and real-time feeds

- Created Android app that used Google Maps API to search for places near current location.
- Curated a database of live feeds on every location with Firebase, update and retrieve information.

WingBuddy, First Prize Winner – HackEmory 2016 **Apr 2016**

Alerts you when your roommate is at home. Get that perfect opportunity when you need the room to yourself.

- Create the front-end Android app, focusing on clean design and user experience.
- Retrieved information from Raspberry Pi motion detector and update the front-end in real-time with Firebase.

TheBot, First Prize Winner – CodeB with Bloomberg hackathon 2016 **Feb 2016**

Stock trading algorithm in a simulated environment

- Focused on earning the highest dividend, analyzed stock price patterns to determine the best value stocks.
- Grew an initial portfolio of $3,000 to over $500,000 during trading simulation.

Labyrinth, Top 10 Finalist – University of Florida SwampHacks 2016 **Jan 2016**

Addictive multiplayer cross-platform maze survival game

- Designed game screens, maps and texture with Photoshop and created 3D maze levels in Unity.

2 by 2 Rubik's Cube Solver, Grand Prize Winner – Georgia Tech Appathon 2015 **Oct 2015**

Solve 2 by 2 cubes by taking pictures of their sides

- Developed Android app to acquire cube faces through the camera, processed image data with color detection algorithm.
- Coded Rubik's cube algorithm to display solution steps back to user.

LEADERSHIP:

Southeast Asian Student Association (SEASA), *Treasurer* **Jan 2016 – May 2017**

- Manage all SEASA funds, from member dues to event costs.
- Raise awareness for SEASA with a singing item at International Harmony Day held by GT India Club.
- Work with the executive committee to organize various fund-raising events throughout the year.