Nicholas Jiang

Software Engineer

(+1) 617-688-7474 | njiang747@gmail.com | nickjiang.me | njiang747 | nicholasjiang

Experience

Nuro | Software Engineer — *Jul. 2018 - Present* | *Mountain View, CA*
- Building software for simulation at Nuro, a robotics startup developing an autonomous vehicle for local goods delivery.

Microsoft | Software Engineering Intern - Artificial Intelligence and Research Division — *Jun. 2017 - Aug. 2017* | *Bellevue, WA*
- Developed Poseidon, a service-agnostic autoscaler that utilizes a predictive model of future load and real-time data to preemptively scale cloud resources in order to efficiently handle varying traffic loads.

Stroz Friedberg | Cyber Summer Associate — *Jun. 2016 - Aug. 2016* | *Boston, MA*
- Extended code comparison software through the development of a visualization and review application comprised of over 5,000 lines of HTML and JavaScript, focused on analyzing and presenting evidence for use in intellectual property litigation cases concerning potential code theft.

Princeton University | Computer Science Lab TA — *Jan. 2016 - Jan. 2018* | *Princeton, NJ*
- Hosted weekly lab TA hours for students in the Introduction to Computer Science (Java), Data Structures and Algorithms (Java), and Systems Programming (C & x86-64 Assembly) classes.

CIeNET Technologies | Android Development Intern — *Jun. 2015 - Aug. 2015* | *Santa Clara, CA*
- Developed Android applications employing their in-development mobile communications package.

Education

Princeton University | Bachelor of Science and Engineering, Computer Science — *Sep. 2014 - Jun. 2018* | *Princeton, NJ*
- Graduated Summa Cum Laude: Departmental GPA - 3.98, Cumulative GPA - 3.94.
- Member of the Phi Beta Kappa Academic Honor Society, Tau Beta Pi Engineering Honor Society, and Sigma Xi Scientific Research Society.
- Awarded the Accenture Prize in Computer Science (2017) and the Shapiro Prize for Academic Excellence (2016).
- Relevant coursework includes: Data Structures and Algorithms, Systems Programming, Functional Programming, Artificial Intelligence and Machine Learning, Neural Networks, Graduate Level Computer Vision, Natural Language Processing, Computer Networks, Operating Systems, Distributed Systems, Information Security, Computer Graphics.

Projects

Tyle | Top 10 Hack, Audience Favorite, Best Design — *Apr. 2018* | *HackPrinceton Spring 2018*
- Designed and wrote a Python application utilizing a paper dashboard and a camera to control applications and navigation on a computer.
- Worked on the core vision component allowing our application to recognize a variety of paper tiles and other paper input.

TranslatAR | Top 10 Hack, Audience Favorite, Best Hack for Social Good — *Nov. 2017* | *HackPrinceton Fall 2017*
- Worked with two other hackers to develop an augmented reality application in Python that took advantage of Microsoft Cognitive Service's Translation APIs to provide real-time subtitles when talking to others speaking in a foreign language.
- Focused on multi-threading the application enabling it to attend to audio from multiple input sources in different languages simultaneously.

Papyr | Top 10 Hack, Audience Favorite — *Apr. 2017* | *HackPrinceton Spring 2017*
- Developed a Python application with two other hackers, using a standard webcam and a single sheet of paper to create an affordable and easy-to-use trackpad without the need for touch sensors.
- Designed and implemented original algorithms to detect finger movement and clicking built upon OpenCV image transformations.

SketchIt | 2nd Overall, Most Technically Challenging, Best Use of Microsoft Technology — *Nov. 2016* | *HackPrinceton Fall 2016*
- Created a Python application in a group of three allowing users to search for pictures by simply sketching the desired image content.
- Implemented the core engine that scores sketch-to-picture matchings based on edge and pixel level data.

Pic2Paint — *May 2016* | *COS 426: Computer Graphics*
- Developed a web application in JavaScript that renders pictures in a variety of painted styles defined by 14 different parameters.
- Implemented an animation generator enabling the user to see the process of painting the digital canvas in multiple layers of strokes.

Kweri — *Mar. 2016 - May 2016* | *COS 333: Adv. Programming Techniques*
- Worked in a group of five to create a web application that provides streamlined student-professor communication in the classroom.
- Focused on the core app logic and database design and personally implemented much of the reactive UI in JavaScript, HTML, and CSS.

Free-Space | Best Internet of Things Hack — *May 2016* | *HackPrinceton Spring 2016*
- Built a web application in a team of three, using modular sensors to deliver real-time info about the availability of study carrels around campus.
- Implemented the database structure, underlying logic, and web layout in JavaScript, HTML, and CSS using Meteor to provide the application with a responsive feel in conveying real-time data gathered from Electric Imp sensors.

Skills

Programming Python, C++, C, C#, Java, Go, OCaml, SQL, Bash, JavaScript, HTML, CSS, x84-64/IA32 Assembly, MATLAB

Technologies Git, Kubernetes, Bazel, TensorFlow, Azure, Meteor, Bootstrap, Heroku, Linux, Android