

Siyuan (Kelvin) Hu

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EDUCATION

Cornell University, College of Engineering	Ithaca, NY • Aug 2017 – Dec 2018
Master of Engineering in Computer Science	
• GPA 3.6/4.0	
New York University Shanghai, College of Arts and Sciences	Shanghai, China • Aug 2013 – May 2017
Bachelor of Science in Computer Science, Minor in Mathematics, Minor in Business and Finance	
• GPA 3.7/4.0 (Cum Laude)	
• Dean's Undergraduate Research Fund Award (Summer 2015)	

WORK EXPERIENCE

Dipole Tech ♦ Blockchain Developer	Shanghai, China • Nov 2019 – Mar 2020
• Implemented Ethereum smart contracts using Solidity to provide data access and integrated a React-based content management system with Ethereum smart contracts using Web3 to read and write electric meter data.	
Uber Advanced Technologies Group ♦ Software Engineer I	Pittsburgh, PA • Mar 2019 – Nov 2019
• Worked under the AVMaps Applications team in building geospatial web tools that enable geo-specialists to produce high-definition maps for self-driving cars; used React/Redux as the frontend architecture, DeckGL for graphics rendering, and NebulaGL for geometric editing.	
Uber Advanced Technologies Group ♦ Software Engineer Intern	Pittsburgh, PA • May 2018 – Aug 2018
• Designed and implemented map production web tools for geo-specialists, such as the street-level panorama panel using camera images taken by the in-vehicle cameras and the traffic light labelling tool to collect data for triangulation.	
Energolabs ♦ Front End Developer Intern	Shanghai, China • Jan 2017 – Apr 2017
• Developed a management portal using React for a distributed peer-to-peer energy exchange platform to monitor electric meter data, manage user data, and visualize internal business data.	
New York University ♦ Research Assistant	New York, NY • May 2016 – Aug 2016
• Assisted a postdoctoral researcher at NYU Systems Group with writing OLTP benchmarks for a database research project that studies serializability and parallel execution in partially dependent transactions.	

Work Authorization: H-1B Cap Exempt From Previous Employment

SKILLS

Frontend Development: HTML5/CSS3/React/Redux/Webpack/Sass/D3/WebGL2	
Backend Development: Node.js/Express/MongoDB/MySQL	Mobile Development: React Native
Data Science: Numpy/Pandas/PyTorch/Keras	Programming Languages: JavaScript/Python/Java

PROJECTS

Pedestrian Behavior Prediction	Fall 2018	performance latencies using Gantt chart to identify the microservices that caused bottlenecks.
Research project on predicting whether a pedestrian is about to cross the street based on a combination of individual features, global environment cues such as traffic lights and crosswalks, and metadata labels. Used Convolutional Neural Networks to extract features from continuous video frames of pedestrians crossing the street.		
Study Companion Robot	Fall 2017	Built a socially assistive robot that predicts whether participants are engaged in a writing task using a Hidden Markov Model trained on their number of keystrokes per minute, open browser tabs, and facial expressions.
3D Modeling Editor	Fall 2018	Travel Planning for NYC Taxi Pickups Summer 2016
Built a web-based 3D modeling editor with JavaScript and WebGL that enables common geometric editing options, 3D transformations, and a cartoonish shading.		Analyzed historical taxi pickups to study traffic and travel patterns to suggest users on proper timings and locations to get taxis.
Detect Performance Issues in Microservices	Spring 2018	Visualize Flickr Sharing Network Fall 2016
Analyzed performance bottlenecks of a microservice-based network that simulates the Netflix workflow and visualized		Built a visual analytical tool with D3 to help Flickr users better perceive their sharing behavior on the social network.

LEADERSHIP EXPERIENCE

NYU Study Abroad Student Ambassador Program ♦ Student Ambassador	New York, NY • Jan 2016 – May 2016
• Planned events and organized weekly town hall meetings for study abroad students from the NYU Shanghai campus and the NYU Abu Dhabi campus.	
NYU Alternative Breaks Program ♦ Team Lead	New York, NY • Sep 2015 – May 2016
• Led weekly team discussions on educational issues around the world. Traveled to Monte Cristi, the Dominican Republic for a week-long teaching program to help local elementary students with English writing and speaking.	