

# Siyuan (Kelvin) Hu

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## EDUCATION

<b>Cornell University, College of Engineering</b> Master of Engineering in Computer Science <ul style="list-style-type: none"><li>GPA 3.6/4.0</li></ul>	<b>Ithaca, NY • Graduated Dec 2018</b>
<b>New York University Shanghai, College of Arts and Sciences</b> Bachelor of Science in Computer Science, Minor in Mathematics, Minor in Business and Finance <ul style="list-style-type: none"><li>GPA 3.7/4.0 (Cum Laude)</li><li>Dean's Undergraduate Research Fund Award (Summer 2015)</li></ul>	<b>Shanghai, China • Graduated May 2017</b>

## WORK EXPERIENCE

<b>Dipole Tech</b> ♦ <i>Blockchain Developer</i> <ul style="list-style-type: none"><li>Worked on implementing Ethereum smart contracts using Solidity to provide data access and integrated a React-based management website with the smart contracts using Web3 to read and write electric meter data.</li></ul>	<b>Shanghai, China • Nov 2019 – Mar 2020</b>
<b>Uber Advanced Technologies Group</b> ♦ <i>Software Engineer I</i> <ul style="list-style-type: none"><li>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.</li></ul>	<b>Pittsburgh, PA • Mar 2019 – Nov 2019</b>
<b>Uber Advanced Technologies Group</b> ♦ <i>Software Engineer Intern</i> <ul style="list-style-type: none"><li>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.</li></ul>	<b>Pittsburgh, PA • May 2018 – Aug 2018</b>
<b>Energolabs</b> ♦ <i>Front End Developer Intern</i> <ul style="list-style-type: none"><li>Developed an admin management system using React for a distributed peer-to-peer energy exchange platform to monitor electric meter data, manage user data, and visualize internal business data.</li></ul>	<b>Shanghai, China • Jan 2017 – Apr 2017</b>
<b>New York University</b> ♦ <i>Research Assistant</i> <ul style="list-style-type: none"><li>Assisted a postdoctoral researcher at NYU Systems Group with writing benchmarks for a database project that enables serializability as well as parallel execution for partially dependent transactions.</li></ul>	<b>New York, NY • May 2016 – Aug 2016</b>

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

## SKILLS

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

## PROJECTS

<b>Pedestrian Behavior Prediction</b> 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.	<b>Fall 2018</b>	performance latencies using Gantt chart to identify the microservices that caused bottlenecks.
<b>3D Modeling Editor</b> Built a web-based 3D modeling editor with JavaScript and WebGL that enables common geometric editing options, 3D transformations, and a cartoonish shading.	<b>Fall 2018</b>	<b>Study Companion Robot</b> 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, their open browser tabs, and their facial expressions.
<b>Detect Performance Issues in Microservices</b> Analyzed performance bottlenecks of a microservice-based network that simulates the Netflix workflow and visualized	<b>Spring 2018</b>	<b>Travel Planning for NYC Taxi Pickups</b> Analyzed historical taxi pickups to study traffic and travel patterns to suggest users on proper timings and locations to get taxis.
		<b>Visualize Flickr Sharing Network</b> Built a visual analytical tool with D3 to help Flickr users better perceive their sharing behavior on the social network.

## LEADERSHIP EXPERIENCE

<b>NYU Study Abroad Student Ambassador Program</b> ♦ <i>Student Ambassador</i> <ul style="list-style-type: none"><li>Planned events and organized regular town hall meetings for study abroad students from the Shanghai campus and the Abu Dhabi campus.</li></ul>	<b>New York, NY • Jan 2016 – May 2016</b>
<b>NYU Alternative Breaks Program</b> ♦ <i>Team Lead</i> <ul style="list-style-type: none"><li>Organized 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.</li></ul>	<b>New York, NY • Sep 2015 – May 2016</b>