Jessica Hong

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Education

Cornell University - B.S. Computer Science, Minor in Mathematics GPA: 3.76, Dean's List all semesters

Experience

Lyft - Software Engineering Intern, Growth

 Designed and implemented backend data pipeline and API to create 200k Lyft City Guides pages for SEO purposes, using Flask, Presto, and DynamoDB

Google - Associate Product Manager Intern, News on Search

Lead product development for several features on Top Stories and News Mode on Google search

Cornell University - Research Assistant, Professor Thorsten Joachims

- Implemented ranking simulations to study the effects of group affiliation on fairness, algorithmic bias, and user utility
- Developed linear programming methods to enforce individual fairness in ranking systems based on previous work on group fairness constraints

Google - Engineering Practicum Intern, Google Earth Engine

- Created an on-the-fly GIF encoding service using FFmpeg and a secure backend server that enables users to export animations to quickly visualize satellite data sets
- Designed and implemented a Color API in Java that allows users to programmatically create color palettes for geospatial data visualizations

Program of Computer Graphics - Research Assistant, Professor Donald Greenberg

- Composed research reports to analyze current trends in VR eye tracking and propose improvements using foveated rendering
- Used C++, Unreal Engine 4, and Python to analyze real-time eye tracking data in 3D virtual reality environments with the HTC Vive and SMI eye tracker
- Researched and developed eye movement prediction models, using the extended Kalman filter and taylor series model, to enable foveated rendering methods methods

Mezmeriz Inc - Research Intern

 Constructed 3D meshes of indoor environments from LiDAR point cloud data using point segmentation and meshing algorithms in C++

Extracurriculars

Contrary Capital - Venture Partner

Source, evaluate, and invest in student and faculty run start-ups as part of a decentralized university-focused venture fund

Carriage - Co-Founder

- Create a paratransit application to provide more flexible and affordable transportation options to those with disabilities
- Developed a scheduling algorithm integrated with AWS to create a web application for automated vehicle dispatch

Cornell Design and Tech Initiative - Backend Developer

- Created a web planner that uses data-driven feedback to improve student productivity and time management
- Analyzed user productivity and maintained the database through writing python firestore functions

Introduction to Analysis of Algorithms - Teaching Assistant

- Lead review sessions and weekly office hours
- Developed review materials and practice problems in areas such as dynamic programming and probability

Spark Product and Industrial Design Team

- Mocked an app to address food waste on campus through a semester long product design process
- Conducted user interviews to understand student food waste patterns on campus
- Wrote design documents to detail ideation processes, discuss possible solutions and tradeoffs, and explain initial mockup

Ithaca, NY / 2016 - 2020

Ithaca, NY / Fall 2018 - Current

New York, NY / Summer 2019

San Francisco, CA / Fall 2019

Mountain View, CA / Summer 2018

Ithaca, NY / Spring 2017 - Spring 2018

Fall 2018 - Present

Fall 2018

Spring 2018

Ithaca, NY / Summer 2017

Spring 2019 - Present

Spring 2019 - Present