

Jessica Peng

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Education

Columbia University

Major: Computer Science

New York, NY

Expected Graduation: 2022

GPA: 3.8, **Honors** Dean's List, **ACT:** 35

Coursework: Python, Java, Data Structures, User Interface Design, Artificial Intelligence, JavaScript, C, C++, Databases, Linux, Programming Language and Translators, Natural Language Processing

Professional Experience

Goldman Sachs

New York, NY

Engineering Analyst Intern

June – August, 2021

- Built an API suite to detect abnormalities and provide analysis and visualizations on Interest Rate Top Sheet (IRTS) Aggregation jobs used to calculate risk of positions and assets after shocks to interest rates
- Automated the existing process of monitoring the health of production pipelines and ensuring Service Level Objectives (SLO) are met
- Created a frontend interactive risk dashboard interface for users to input specific parameters for statistical analysis and anomaly data
- Deployed a general library and expanded API for firm wide users in all divisions across Goldman Sachs to implement in order to obtain statistical and visual data on internal procmon jobs and determine trends to increase efficiency of runs in production

Apple

Cupertino, CA

Software Engineering Intern

May – August, 2020

- Designed and programmed a full stack web application tool to test IPv6 network resiliency at Apple by testing IPv6 host implementations to improve Apple's overall network in Enterprise, Datacenters, Retail, and PCI-BZ transactions
- Developed an API using Chiron Framework and Scapy API that crafts packets, sends network checks, and interpret packet results to observe behavior and security of network
- Implemented a backend API, designed and programmed a frontend user interface client, and connected client to service to run checks
- Set up a MySQL database to update data and sessions to measure the progress of each team's IPv6 network security over time.

Digital Visual/Multimedia Lab and Tow Center for Digital Journalism, Columbia University

New York, NY

Computer Vision AI Research Intern

June 2019–December 2019

- Built machine learning models with TensorFlow Object Detection API to correctly identify extremist group symbols in protest data to provide a real-time informative tool for photo-journalists to analyze right and left winged groups in protests and rallies
- Trained Faster RCNN object detection models on Open Image Dataset to detect crisis symbols in high risk objects
- Augmented training data in Blender on wind speed, lighting, camera angle, with scripting and pasted new data with PIL library

Co-founder of RESP, 1st Place IBM Call for Code Challenge

New York, NY

Winner of IBM Angel Hacks Developer Challenge, Startup Co-Founder

June 2019

- Created application RESP: A first responder's toolkit in the aftermath of a natural disaster to reconnect victims with family
- Designed the UI/UX and programmed the frontend with React and Django REST Framework
- Built facial recognition function and created user database for identifying found family members into catalog

Alinea Invest Blockchain Startup, Featured in Forbes Under 30 Startup Summit

New York, NY

Web Developer

August 2019 – January 2020

- Programmed the frontend web platform for Alinea Invest in React and Node.js for business platform and worked on business model in order to build a target market, sell products, and increase publicity and awareness

Leadership and Activities

Columbia Private Equity Club, Columbia University

New York, NY

Executive Board Member, VP of Marketing

September 2019 – Present

- Coded a web platform to promote club (columbiaprivateequity.com), created recruiting schedule, organized events for analysts

Engineering Without Borders: Uganda, Columbia University

New York, NY

Executive Board Member, Tech Team

September 2018 – Present

- Created plans to install renewable energy micro-grids to provide electricity to schools, health centers, and businesses
- Served on E-Board and planned the NYC Regional EWB Conference, wrote legislation, and organized travel teams

Skills

Programming: Python, Java, React, HTML, CSS, Swift, JavaScript, C, C++, C*, MySQL, Git, Flask, Unix, Kubernetes, AWS

Software: SolidWorks, CAD, MATLAB, Maya Autodesk, Slicer MRI, Arduino, Figma, Sketch, Premiere Pro, Photoshop, Excel

Skills/Interests: Product design and UIUX, Startups, Blockchain, Spikeball, film production, teaching dance

Languages: French (intermediate), Chinese (fluent)