Jonathan Wang

jnwang19@berkeley.edu | 609-541-1129 | linkedin.com/in/jonathan-wang- | github.com/jnwang19

EDUCATION

University of California, Berkeley   Aug 2018 – May 2022
B.A. Computer Science   GPA: 4.0
EECS Honors Program – Mathematics Breadth

EXPERIENCE

Software Engineer Intern, Palantir Technologies, New York, NY   May 2020 – Aug 2020
- Built a backend feature that automatically assigns Spark configurations to Kubernetes clusters based on the complexity of queries being run, optimizing an existing dataset build tool used 3 million+ times per month by both clients and employees; this feature also facilitated the infrastructure migration of Palantir's second largest deployment by revenue.
- Reduced resource wastage and runtime of Spark programs, decreasing unused CPU percentage and job duration by up to 25% and 50% respectively for dataset builds within an internal deployment.
- Defined API endpoints, executed user-safe incremental rollouts, interfaced with distributed systems and databases, set up metric-backed reports, and presented an architecture talk.

Software Engineer Intern, DeepHow, Detroit, MI   Jan 2019 – Oct 2019
- Generated 20,000+ training samples after creating a data pipeline for a text summarization model; wrote Python scripts to scrape PDFs from the web, and used PDF.js to extract images and parse section titles.
- Developed a multi-lingual audio and subtitle generation feature for videos, incorporating Vue.js, a translation API, and Cloud Firestore.
- Rebuilt a video upload progress bar to dynamically estimate processing and uploading time.

Natural Language Understanding Lab Intern, Academia Sinica, Taipei   June 2019 – Aug 2019
- Performed error analysis on state of the art named entity recognition models, including BERT and Flair.
- Built original NER models in PyTorch to enhance contextual information learned, including a self-attention model with Flair embeddings, masking in BERT, and adding syntactic dependencies.

INVOLVEMENT

EECS Course Staff, UC Berkeley EECS Department, Berkeley, CA   Jan 2019 – Present
- Graded assignments and provided guidance on projects, labs, and homework at office hours.
- Courses taught: CS 61A (Python, SQL, program structure), CS 61B (Java, data structures, algorithms), CS 70 (discrete math, probability theory).

Developer / Technical Product Manager, Blockchain at Berkeley, Berkeley, CA   Sept 2018 – Aug 2020
- Led a team of business consultants, designers, and developers to deliver a go-to-market strategy and product demo as part of a consulting engagement with a blockchain firm specializing in data privacy.
- Developed a proof of concept identity management platform for Samsung, integrating Microsoft Azure Blockchain Workbench with a React frontend.
- Designed and developed a full stack eBook resale application on Ethereum, using Web3.js to integrate Solidity smart contracts with an HTML/CSS frontend.

Undergraduate Researcher, UC Berkeley EECS Department, Berkeley, CA   Sept 2019 – Dec 2019
- Contributed to a neural program synthesis project to automatically convert natural language questions to SQL queries, under Prof. Dawn Song's lab.
- Improved beam search reranking for Spider dataset queries by fine-tuning a BERT matching model.

Undergraduate Researcher, Haas School of Business, Berkeley, CA   Feb 2019 – May 2019
- Performed cross-dataset generalization computer vision tests using OpenCV and TensorFlow CNNs.
- Compared domain adaptability of different features such as HOG and grayscale.

SKILLS

- Languages: Java, Python, C, SQL, HTML/CSS, JavaScript
- Libraries/Frameworks/Technologies: PyTorch, pandas, React, Vue.js, Git