Sohini Kar

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Education

Massachusetts Institute of Technology

Major: **Computer Science**, Minor: Brain and Cognitive Science — August 2018 - May 2022

Skills

Computer Languages: Python, Java, Matlab, Julia, LaTeX, HTML, CSS, Javascript
Technologies: OpenCV, Tensorflow, Numpy, PyTorch, Elasticsearch, ReactJS, Scrapy, Flask, Firebase
Languages: English, Bengali, Spanish, Hindi, Russian (Beginner)

Experience

Confluent — Mountain View, CA

Backend Software Engineering Intern, Tools Team — *May 2020 – August 2020*

- Created web application to pull organization event data from GitHub to post to Kafka cluster
- Used GitHub Apps to post event data to REST API endpoint, authenticated and pushed payloads to appropriate Kafka topics using Python
- Learned about the software development life cycle along with agile development with Jira

Securiti — San Jose, CA

Machine Learning Extern — *December 2019 – January 2020*

- Trained language models on a specified corpus of texts to generate own versions of the texts, examined effects of various parameters such as model size on quality of outputs
- Used Tensorflow, and gained experience with machine learning, NLP, and RNNs

NASA Jet Propulsion Laboratory — Los Angeles, CA

Software Engineering Intern, Search Team — *June 2019 – August 2019*

- Developed a tool to find similar images based on image features and page context using Python, OpenCV, and Tensorflow, used Scrapy to scrape and index images into Elasticsearch
- Created image search engine front-end using React.js to query for images from Elasticsearch cluster with 10,000+ images for use by 6,000+ people at JPL
- Recreated and optimized the internal image search engine to include results based on content of images rather than just context, added interactive features such as clickable tags

Vision Research Lab at MIT — Boston, MA

Undergraduate Researcher, Sinha Lab for Vision Research — *February 2019 - February 2020*

- Analyzed videos of Project Prakash children's eyes using computer vision techniques and feature tracking to quantify the extent of eye movements exhibited across eye surgery

Leadership and Awards

Campus Involvement: President of UI/UX @ MIT, Vice President of High School Outreach for MIT Women Business Leaders, Director of Technology for MIT Model UN, Marketing Chair for Artificial Intelligence @ MIT
Awards and Membership: Rewriting the Code Fellow, Facebook Above and Beyond Computer Science, Figma Award at hACCESS 2020, Best Domain at Hack Girl Summer 2020, National Merit Scholarship Winner 2018, Regional Finalist for Siemens Competition 2017, President's Volunteer Service Award Gold 2017+2018