TARUN KUKREJA

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EDUCATION

California State University East Bay, Hayward, CA   August 2021 - Present
Master of Science (MS) in Computer Science

Guru Gobind Singh Indraprastha University, New Delhi, India   August 2015 - May 2019
Bachelor of Technology (B.Tech) in Computer Science and Engineering   GPA - 8.51/10.0

TECHNICAL SKILLS

Programming/Scripting Languages: Python (proficient), JavaScript (familiar), SQL
Frameworks and technologies: Django, Flask, React, MySQL, MongoDB, Azure, AWS, Firebase, Docker, Git

WORK EXPERIENCE

Software Engineer, Pirhoalpha Research Pvt. Ltd., Mumbai, India   January 2021 - August 2021

- Designed and versioned **APIs in Django**
- Documented all related work according to the company's methodologies
- **Containerization** of applications by building Docker container images
- Maintained the company's database and server on **AWS**. Designed data models according to the requirements of the application and improve query performance
- Wrote **scripts on Raspberry Pi** in order to establish and maintain communication between hardware devices(Air Quality Sensors) and software(company's server where data from Air Quality sensors are maintained)

Software Engineer (Machine learning team), Havells CRI, Bangalore, India   January 2020 - June 2020

- Designed an **Ads Recommendation Engine** used to show products ads on the company's official app
- Contributed to developing **Alexa Smart Home Skills** and **Actions on Google** for the company's smart home products which is controlled with the company's app.
- Created a **custom JupyterHub on Docker,** allotting each contributor a container, enabling sharing of notebooks at will, and automatically backup the files on the host system.
- Researched and Documented which **MLOPs** is the most effective for the company in terms of cost and requirements

Product Engineer, Product Labs, IIIT-H Foundation, Hyderabad, India   July 2019 - November 2019

- Critiqued the research paper *Towards Structured Analysis of Broadcast Badminton Videos* by pointing out the shortcomings and proposed solutions to those drawbacks. Suggested extensions to the paper
- **Improved training time by 1.45x and accuracy by 4%** of Player Stroke Segmentation in the research paper by applying **Pose Estimation** and CNN.
- Developed a website for Badminton Player Analysis using Node.js, MongoDB and W3.css

Data Science Research Intern, GVCL Lab, IIIT Bangalore, India   June 2018 - August 2018

- Worked on **IBM funded** project on visual analytics of population health surveys, with a focus on NFHS-4 dataset
- **Data Preprocessing** and **Data Wrangling** of datasets of NFHS-4
- Gave a talk on the research paper *VAT: a tool for visual assessment of (cluster) tendency*
- Developed **five interactive visualizations** using **D3.js** to represent NFHS-4 Datasets.

Android Developer Intern, Markitiers, Delhi, India   June 2017 - August 2017

- Built Events Mosaic app, which is an app to connect event organizers, attendees, sponsors, speakers. The app received **100+ downloads** and an average rating of **4.8/5** on Google Play Store.
- Documented an SRS and devised a strategy along with the founder to implement the entire Events Mosaic product.

PROJECTS

QElim Android App (Java, XML),   March 2017 - May 2017

- I built this app to **eliminate the queues from restaurants**. Customers could schedule their orders on their way to restaurants and pick up their orders in the time slot chosen by them.

Flick Android App (Java, XML),   March 2017 - April 2017

- I have always been a movie buff, hence I created an app to display top-rated, popular, and upcoming movies. I made the app using the MoviesDB API, the app included movie trailers, duration, release date, cast, and genre.

CERTIFICATIONS & EXTRACURRICULARS
- Algorithmic Toolbox, Coursera
- Machine Learning, Coursera
- Core team member of the Entrepreneurship club and Environmental club of my undergraduate college