

# TARUN KUKREJA

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## WORK EXPERIENCE

**Software Engineer**, ActiveBuildings, Mumbai, India

January 2021 - Present

- Designing and versioning of **APIs in Django**
- Document all related work according to the company's methodologies
- **Containerizing** applications by building Docker images
- Maintaining the company's database and server on **AWS**. Design and maintain data models according to the requirements of the application and improve query performance
- Write **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)**, 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 results** of 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 & Product Head**, Markitiers, Delhi, India

June 2017 - February 2018

- 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.

## EDUCATION

**California State University East Bay**  
Master of Science in Computer Science

August 2021 - August 2023

**Guru Gobind Singh Indraprastha University, New Delhi, India**  
Bachelor of Technology in Computer Science and Engineering(GPA - 8.51/10.0)

August 2015 - May 2019

## 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 based. I made the app using the **MoviesDB API**, the app included movie trailers, duration, release date, cast, and genre.

## TECHNICAL SKILLS

**Programming/Scripting Languages:** Python(proficient), JavaScript(familiar)

**Frameworks and technologies:** Django, Flask, MySQL, MongoDB, AWS, Docker, VM, Git

## CERTIFICATIONS & EXTRACURRICULARS

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