Rashmil Panchani

2179048844 rmp6@illinois.edu LinkedIn: rashmil-panchani Github: Rashmil-1999 rashmil-1999.github.io

Education

University of Illinois at Urbana-Champaign **Dec. 2022**
Masters of Computer Science *GPA: 4.00/4.00*

University of Mumbai, Dwarkadas J. Sanghvi College of Engineering **Jul. 2021**
Bachelors of Computer Engineering *GPA: 3.99/4.00*

Technical Skills

Programming Languages: Python, JavaScript, Java, TypeScript, Go, C, C++.

Libraries & Frameworks: Node.js, Flask, Django, Spring Boot, Fast API, HTML, CSS, Bootstrap, NextJS, React, Redux, GraphQL, Keras, TensorFlow, Pytorch, OpenCV, NumPy, Pandas, Matplotlib, Arduino, WebRTC, NLTK.

Databases: MySQL, PostgreSQL, SQLite, MongoDB, Redis.

Tools & Platforms: Git, Github Actions, Docker, AWS, GCP, Heroku, Hasura, Firebase.

Experience

National Center For Supercomputing Applications (NCSA) **Champaign, Illinois**
Graduate Research Assistant - Part-Time *Sept. 2021 - Present*

- Building Scalable web backend using **FastAPI** to to query a Database of 20,000 plus species found in the HMS Report.
- Designed and Created streamlined workflows that **Extract, Process, and Store 2000 plus pages** of Textual data scanned from HMS Challenger Report using **Python**.
- Implemented **CI-CD Pipelines** that **builds** the source code, **containerize** it, and **ship it to production** using **Github Actions** and **Docker** in **30 to 40 minutes**.

Department of Computer Science **Champaign, Illinois**
Research Assistant *Jan. 2022 - May 2022*

- **Formulated Algorithms** to **model data** in Python to generate *Multi-Dimensional Graphs* containing 200,000 nodes.
- **Devised** an **end-to-end** system that **Visualizes Bibliographic** networks and helps the **Conference/Journal** panelists to infer possible conflicts between paper reviewers. Thus, **enabling** the **panelists** to make **informed decisions** in their allocation.

Phionike Solutions **Mumbai, Maharashtra**
Technology and Machine Learning Research Intern *May 2019 - Jul. 2019*

- **Pioneered** a new **Research and Development Department** at the Startup.
- **Established 6** different research projects and laid the groundwork for further development by performing **Risk and Requirements** analyses.
- **Conceptualized** and **Programmed** an **Amazon Alexa Skill** that can read blogs from numerous websites using **AWS Lambda** for custom business logic and **AWS S3** for storing business metadata in **Javascript**.

Projects

Smart Garden | *React, Hasura, GraphQL, Arduino, RaspberryPi* **Nov. 2020 - Jun. 2021**

- Built an **IoT** based **Smart Garden React** application to **monitor** and **irrigate** the plants in **real time**.
- Employed **Hasura GraphQL Cloud** to create a highly **scalable** and **available** backend.
- Developed **Micro-Services** for **Authentication** and **Data Pre-Processing** tasks.

NLP & CV Projects | *OpenCV, Tensorflow, Pytorch, NLTK* **Nov. 2019 - Jan. 2021**

- **Telegram Chatbot** to answer StackOverflow Questions using NER, PoS Tagging and Embedding Ranking algorithms.
- Face recognition, Emotion Recognizer and Car number plate detector from CCTV footage using OpenCV.

Web Projects | *React, Django, Flask, HTML, CSS, Bootstrap, SQL, PostgreSQL* **Jan. 2018 - Jun. 2021**

- Profile page, DJ Archive (**Project Lead**), College Event Manager, Hackathon Projects, Course Projects.

Leadership & Activities

DJ Unicode **Aug. 2018 - Jun. 2021**
Senior Mentor and Events Head

- Mentored and guided a batch of nearly **50** to **60** Sophomores & Juniors in various projects
- *Led* numerous project teams in different roles, *Conducted Workshops* on *Web Development* in *Python* using *Django*, and taught *Object-Oriented Programming* to nearly **30 - 40** Freshmen and Sophomores.
- *Mentored* and *managed 3 teams* that developed software that was *shipped to production* and *deployed at the college level.*

E - Yantra Robotics Competition **Aug. 2018 - Jan. 2019**
Team Leader

- **Led** a team of **4** to the **semi - finals** of the competition.
- *Assembled* a *line following robot* with *pick and place* mechanism and *color sensing* capabilities using *sensors and Arduino.*