# Varun Upadhyay (IEEE Member)

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## EDUCATION

## University of North Carolina at Charlotte

Charlotte, NC

Master of Computer Science (AI/ML, Robotics, Gaming)

Jan. 2023 – Aug. 2024

Bachelor of Computer Science, (Additional Minor in Mathematics)

Aug. 2020 – Dec. 2023

GPA: 3.61/4.0 - Chancellor's List

# Experience

# Full Stack Developer Intern

May 2023 – Aug 2023

Allstate Insurance

Orange, CA

- Developed and enhanced offer generation APIs and endpoints, leveraging full stack development skills, to facilitate the seamless creation and delivery of personalized offers for millions of Allstate Insurance customers, ensuring an exceptional user experience.
- Collaborated closely with cross-functional teams to analyze requirements, design efficient and scalable offer generation solutions, and implemented robust code using modern technologies, resulting in the successful integration of offer generation APIs and endpoints that significantly improved the efficiency and accuracy of the process.

# Undergraduate Teaching Assistant

Aug. 2022 - Dec. 2022

University of North Carolina Charlotte

Charlotte, NC

- Aided Instructor in course planning and delivery to 60+ students.
- Boosted student involvement by nearly 40 percent and facilitated a safe environment for student learning.

#### TECHNICAL SKILLS

Languages: Java, Javascript, Python, C/C++, SQL (Postgres), HTML/CSS, Dart

Coursework: Data Structures and Algorithms, Applied Machine Learning

DevOp Tools: Git, Gitlab, Postman, DataDog, Vim, J-Unit, Jetkins, Artifactory, CMD, Linux, Google Cloud Platform, Agile Methodology

Libraries: TensorFlow, OpenCv, MediaPipe, Pandas, NumPy, Matplotlib, Keras, Scikit-Learn

# PROJECTS

#### Character | Python, NumPy, TensorFlow, GitLab

Sept. 2022

- Filtered input image from OpenCV to find Edges, corners and shapes using Canny Edge Detection and voting on image space using Hough transform.
- Extracted and assigned image patches, and features to add to classifiers of a visual bag of words to be used during model training.
- Trained a CNN model using TensorFlow on prelabeled images from a massive online dataset.

#### G Edu-Life | Python, TypeScript, Node.js, HTML/CSS, SQL, CockroachDB, Git (HackDuke-2nd)

Oct. 2022

- Managed and established a database using Cockroach Database.
- Built Rest API's and endpoint request to read, write, retrieve and update the database.
- Implemented Node.js, TypeScript and HTML/CSS to design and host game on localhost.

## Chare | Python, SQL, MongoDB, Flutter, Git, Figma

Oct. 2021

- Designed a backend using REST framework to facilitate API requests and establish local web servers for Front-end.
- Established a harmonious connection between API requests and the SQL database, thereby facilitating the efficient retrieval and alteration of data.
- Employed Git to consistently and collaboratively push and merge files to the master branch with team members.

# Extracurricular

- Played in University of North Carolina at Charlotte intramural volleyball.
- Member of the cricket club which organizes and plays games every week against other teams.
- Placed 3rd in a University held pool/billiards tournament organized by the Pool Club.