

Viswonathan Manoranjan

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Education

University of North Carolina, Chapel Hill

Master of Science in Computer Science

Chapel Hill, NC

Aug 2025 – Present

National Institute of Technology, Tiruchirappalli

Bachelors in Computer Science and Engineering | GPA: 3.9/4.0

Trichy, IN

May 2019 – May 2023

Experience

Wells Fargo

Aug 2023 – Jul 2025

Software Engineer, Consumer Technology

Hyderabad, IN

- Led development of end-to-end **Java SpringBoot** batch job solutions for efficiently handling payment exceptions, reducing manual data processing efforts by **30%**, showcasing full-cycle Agile delivery.
- Engineered internal **React** micro-front-ends to migrate an existing check decision-making legacy application, improving client-side performance by **25%**.
- Formulated a BDD-based automation test suite in **Java** for the Personal Lending Alerts back-end application, and integrated it with the **Jenkins** CI/CD release pipeline.

Wells Fargo

Jun 2022 – Aug 2022

Intern Analyst, Consumer and Small Business Banking

Hyderabad, IN

- Streamlined a real-time analytics pipeline using **Kafka** and **PySpark** on the back-end, mitigating the latency by **40%**, handling **10,000** concurrent users and hosted a **React**-based monitoring dashboard in the Consumer and Small Business division.


New York University

May 2021 – Dec 2023


Research Assistant, Research Guide: Dr. Hanan Salam & Dr. Oya Celiktutan

- Designed a new fairness loss function (**MGP**) for generalised bias mitigation, resulting in a **35%** improvement in DIR percentage across different settings compared to baseline methods on FIV2 and UDIVA datasets.
- Integrated Efficient Neural Architecture Search (**eNAS**) to develop personalized models for OCEAN personality values, winning the ChaLearn ICCV 2021 Challenge with an MSE of **0.769**, collaborating with King's College, London.

Projects

IdentAI - Identity Impersonation Detection Web Application 

- Developed a **React** app using **Azure**-hosted **Python** ML models for speech, language, emotion detection, and database verification from audio files to detect identity impersonation for the Wells Fargo Global ETP Hackathon.

FinPersona AI - Identity Impersonation Detection Web Application 

- Implemented a full-stack **Flask-React** financial platform integrating **OpenAI**, featuring an AI assistant, personalized dashboards, intelligent product recommendations, and predictive insights for proactive, data-driven financial guidance.

Interview Screening through Personality Detection 

- Designed a multi-task, multi-modal system on **Tensorflow** for automated personality recognition that evaluates job applicants using **facial landmarks**, Audio **MFCC features**, **BERT Sentiment analysis**, and other communication characteristics.

Multi-person Pose Detection 

- An **OpenCV** program that detects individual people from a video frame using **YOLO object detection**, crops the frame, and passes the frame through **Mediapipe** pose detection to get the identified body keypoints of the individual people.

Publications

Towards Generalised and Incremental Bias Mitigation in Personality Computing

Dec 2024

IEEE Transactions on Affective Computing '24

Optimized Reversible Cellular Automata Based Clustering

Aug 2023

Cellular Automata and Discrete Complex Systems. AUTOMATA'23

Generalised Bias Mitigation for Personality Computing

Oct 2023

Proceedings of the 1st International Workshop on MRAC '23, ACM MM conference

Learning Personalised Models for Automatic Self-Reported Personality Recognition

Oct 2022

Understanding Social Behavior in Dyadic and Small Group Interactions, PMLR 173:53-73, 2022

Technologies

Languages: Python, Java, JavaScript, C++ , C, HTML, CSS, SQL, JSX, TypeScript

Technologies: Tensorflow, Numpy, OpenCV, Kafka, MongoDB, Jenkins CI/CD, Splunk, Postman, Microsoft SQL Server