(312) 928-9590 • manudeva2025@u.northwestern.edu • manudeva.com

### **EDUCATION:**

## Northwestern University - BS in Computer Science, Major GPA: 3.61

**Expected May 2025** 

- Coursework: Databases and Computer Systems, Data Structures and Algorithms, Machine Learning, HCI
- Minor in Economics Econometrics, Microeconomics, Macroeconomics

# **EXPERIENCE:**

## **Chief Technology Officer, Student Holdings**

Oct 2022 - Present

- Manage new technology and Zapier workflow integration in a portfolio of 4 student-run businesses to assist in the generation of \$100,000+ in annual revenue.
- Lead development of interactive, client-side React application with Firebase backend for residential laundry service catering to 40+ students.

## App Developer, ORCO - The Garage at Northwestern

Apr 2023 - Sep 2023

- Developed an executable Electron and React desktop application, designed in Figma, for control and visualization of arm prostheses in research and daily use.
- Maintained company website and product documentation to connect the startup to new investors and markets, secure funding with an NSF research proposal, and contribute to brand amplification.

## Store Generalist, Macy's Inc

Jun 2022 - Sep 2022

- Delivered excellent customer service and addressed technical issues to enhance shopper experience and transact up to \$2,000 daily business on an individual level.
- Efficiently recovered and stocked back-end and on-floor inventory to ensure a professional retail environment and support \$30,000+ in daily departmental sales.

# **PROJECTS:**

# **PAM, Intelligent Information Systems**

Oct 2023 - Present

- Develop a large language model to act as a virtual receptionist for Northwestern's Computer Science department that streamlines access to information on professors and department events, deployed as a Flask application on an EC2 instance.
- Integrate OpenAl's LLM with Hugging Face embeddings and an SQLite3 database, implementing a conversational retrieval chain with speech recognition to maintain contextual awareness and provide realistic interaction.

IntervU, HackMIT 2023 Sep 2023

- Worked with 3 other students to develop a Python program that uses computer vision algorithms to track an applicant's body posture, expressions, and eye movements to encourage appropriate body language during an interview.
- Trained a TensorFlow posture detection model and designed/deployed React frontend and Flask backend.

OptiSkate, DTC-II May 2023

 Designed and rapidly prototyped an obstacle detection system using a Raspberry Pi, LIDAR sensor, and light feedback for skateboards in low-light environments.

## **TECHNICAL SKILLS:**

- Languages: Python, JavaScript, C++, C, SQL, Java, HTML, CSS, Scala, Racket, MATLAB
- Developer Tools: Git, GitHub, AWS, GDB, Bootstrap, Linux, Figma, Tableau, Jira
- Frameworks: React, NodeJS, REST APIs, Next.is, Express, MongoDB, Flask, NumPy, Agile, Jupyter Notebook

## **ORGANIZATIONS:**

#### Interactives Editor, North by Northwestern

Sep 2023 - Present

• Lead and collaborate with a team of writers and developers to publish interactive stories using HTML and JavaScript modules to engage an audience of 8,000 students with digital multimedia journalism.

### Project Developer, ML/AI Team, IEEE NU Chapter

Nov 2022 - Apr 2023

• Designed food classification algorithm using CNNs and Python/Jupyter workflow for an IEEE project showcase.

### Active Member, Lambda Chi Alpha Fraternity