



# MANOHAR VELLALA

Norfolk, VA 📞 +1 (757) 217-7155 ✉️ [manoharvellala2000@gmail.com](mailto:manoharvellala2000@gmail.com)  [LinkedIn](#)

 [GitHub](#) Available from *May 2024 - May 2025*

## Education

### Old Dominion University

Expected May 2025

*Master of Science in Computer Science; GPA: 3.8*

*Norfolk, VA*

**Relevant Coursework:** *Web Programming (JavaScript, React, Node.JS), Data Visualization (Tableau, Seaborn), NLP (Sentiment Analysis, Virtual Assistants)*

### B.N.M Institute Of Technology

Jul 2019 – Jun 2023

*Bachelor of Technology in Computer Science And Engineering; GPA: 3.6*

*Bangalore, India*

## Skills

**Languages:** Python, JavaScript, Java, HTML, CSS, SQL

**Technical skills:** Data Structures And Algorithms, Data Analysis, Data Visualization, Full Stack Development

**Frameworks:** React, Spring-Boot, Django, Flask, Angular, Node.JS, Numpy, Pandas, OpenRefine

**Tools:** Microsoft Excel, Powerpoint, GCP, Tableau, Jira, Slack, Agile Methodology, Github

**Databases:** SQL, Postgres, AWS (Amazon RDS, DynamoDB), Neo4j, MongoDB

**Soft skills:** Data-driven, Communication, Strategic Thinker, Team Work, Collaborative

**Certification:** [AlgoExpert.io](#)

## Experience

### Old Dominion University

Norfolk, Virginia, US

*Graduate Assistant - Software Developer*

*Aug. 2023 - Present*

- Revamped Map Communications Inc. login portal using **AWS Lambda**, enabling over 100K+ clients to securely access the portal. Utilized **OAuth 2.0** and **Twilio SMS API** for sending OTPs.
- Designed **CI/CD pipelines** using **Jenkins** to automate building, testing, and deployment of **Django, React, MongoDB** based virtual receptionist system for Map Communications Inc.
- Achieved a 20% client engagement increase through Google Cloud **Conversation AI** and **Voice-AI** integration. This resulted in the creation of lifelike voices to amplify natural and engaging interactions with the clients.
- Engineered the VSorts™ cloud-based **SaaS** web app with cross-functional team (Product, Sales, Engineer, Support, Designers) of 5. Constructed reusable components using **Material UI, Tailwind CSS**.
- Performed unit testing for Restful API using **Chai** and **Mocha** framework.

### ThoughtClan Technologies PVT LTD

Bangalore, India

*Software Engineer*

*Feb. 2023 - Jun. 2023*

- Improved internal access control turnaround time and security by developing a module using Java **Spring-Boot**, integrated with **OAuth 2.0** for authentication and authorization, automating access control.
- Increased productivity by reducing the time and effort required to discover and access data, by deploying a data discovery tool **Amundsen** to a **Kubernetes** (Amazon EKS) cluster, leading to more informed decision-making.

### Indian Space Research Organisation

Bangalore, India

*Software Intern*

*Aug. 2021 - Oct. 2021*

- Designed, developed, and maintained the **Flask-based** Electronic Beam Software web application for I.S.R.O
- Introduced a Machine Learning algorithm (Linear Regression) by performing **Regression Analysis** on variables to predict the beam and focus currents utilizing **TensorFlow, Scikit-learn** for model development and deployment.
- Automated plotting currents with machine parameters using **Plotly**, detecting anomalies in the welding process, saving 120+ engineer hours.

## Projects

### CS120.AI

- Modernized the teaching process at Old Dominion University by Innovating an **Angular, Django, and SQL** based **chatbot** specifically designed for Computer Science courses.
- **CS120.AI** responds to course-related questions and meticulously assess grades for 100+ students. Produces performance graphs for individual students using **Power BI REST API**.
- Alleviated 30+ Teaching Assistant and Professor hours saving \$4800 per semester.

### Graph Visualizer

- Developed Graph Visualizer with **Node.JS** to comprehensively visualise **Graph Algorithms**, including SWARM, Dijkstra's, BFS, and DFS. The Website is deployed live at: [Graph Visualizer](#).

## Awards

### Best Research Intern, Hands On Lab, Old Dominion University

- Achieved this recognition in one of the university's top five research labs for building an **SVM-based ML Model** using accelerometer data sourced from Fitbit Versa 2 to detect sudden movements in agitated patients with 95% accuracy, contributing to increased safety of patients.
- Employed **Apache Kafka** to handle large volumes of device data in a scalable and fault-tolerant manner.