NAITIK SHAH

+1(541)908 3864 | naitikshah1812@gmail.com | LinkedIn

EDUCATION

Oregon State University *April 2024 – December 2025*

Master of Engineering in Computer Science

Coursework: Machine Learning, Computer Architecture, Scientific Visualization, Deep Learning, Advanced Computer Graphics.

University Of Mumbai *July 2018 – May 2022*

Bachelor of Engineering in Computer Engineering

Coursework: Data Structure, Algorithms, Operating Systems, Computer Networks, Artificial Intelligence, Machine Learning, Software Engineering, Data Management System, Data Science and Big Data Analytics, Mobile Application Development.

SKILLS

Technical Skills: Python, Java, SQL, C, C++, JavaScript, HTML, CSS, React, Machine Learning, Deep Learning, NLP, CSS, XML, PowerShell, Bash, Git, Jira, JSON, Data-Structure

Frameworks: Spring framework, Spring Boot, Angular, J2EE, JPA, PyTorch, Pandas, Hibernate, React, Node.js, NumPy, scikit

Database: MySQL,DB2, MongoDB

Soft Skills: Problem Solving, Adaptability, Communication, Teamwork, Mentoring

PROFESSIONAL EXPERIENCE

Student Software Developer, Oregon State University, Corvallis, USA *December 2024 - Present*

- **Developing** Salesforce CRM solutions to streamline workflows and improve user engagement, utilizing **Apex and Lightning Web Components (LWC).**
- **Designing, developing, and optimizing** Salesforce applications tailored to organizational needs.
- **Implementing and configuring** automation tools such as **workflows, process builders, and validation rules.**

Software Engineer, Hexaware Technologies Pvt. Ltd., Mumbai, India *August 2022 – July 2023*

- **Engineered and optimized** software applications using **Java, J2EE, and Spring framework**, achieving **95% code coverage** through rigorous **unit and integration testing**.
- **Developed and enhanced** responsive front-end components with **HTML, CSS, JavaScript, and AngularJS**, improving **load time and UI responsiveness by 20%**.
- **Implemented RESTful API integrations** to enable **seamless front-end and back-end communication**, reducing **data latency by 25%** and improving **user experience**.
- **Optimized** back-end services using **Spring Boot and Hibernate**, reducing **server response time by 30%** and **enhancing system scalability**.

Software Developer Intern, Orno Infosys India, Mumbai, India *October 2019 – September 2020*

- **Developed and automated** an **employee payroll and business management system**, streamlining **reporting and payment processing**, reducing **manual effort by 40%**.
- **Designed and implemented** an **intuitive web application UI**, improving **user experience and adoption rate by 15%**, leading to **faster navigation and a 25% decrease in onboarding time**.
- **Developed and debugged** web applications using **Eclipse IDE**, reducing **bug resolution time by 30%** and improving **code efficiency**.

PROJECTS

CRYO-EM VISUALIZATION ANALYSIS *December 2025*

- Developed a Python script to preprocess **Cryo-EM 2D** projection images, converting PNG files into PLY geometry for visualization.
- Implemented the **Contour Line Visualization Method** using C++ and OpenGL, optimizing scalar field interpolation algorithms for efficiency.
- Built and tested the **Morse-Smale Segmentation Pipeline** in ParaView, leveraging topological data analysis techniques like **persistence homology** for accurate feature extraction.
- Designed and conducted performance evaluations, showcasing the comparative efficiency of visualization methods, with Morse-Smale achieving a computational time reduction of up to **95%.**

AUGMENTED REALITY BASED MENU APPLCATION *January 2022*

- Designed and implemented an augmented reality-based application using **Unity Engine** and **Vuforia SDK**, enabling marker-based tracking to seamlessly integrate **3D virtual models** of food items into real-world environments for enhanced menu visualization.
- Published the project titled **"NAAN – AN AUGMENTED REALITY BASED MENU APPLICATION"** in **International Research Journal of Engineering and Technology**, demonstrating application's potential to revolutionize dining experience through advanced **AR integration** and **3D object rendering.** (Link)

FAKE NEWS DETECTION *March 2021*

- Developed Utilizing **Python** and libraries such as **scikit-learn** and **NLTK** to develop **fake news detection system**.
- Employed **Passive Aggressive algorithm** to classify news articles as **real or fake**.
- Implemented **TF-IDF vectorization** to transform textual data into numerical features, capturing **importance of words** in documents while accounting for **frequency across the corpus**.

EXTRACURRICULAR ACTIVITIES

- Organized **technical workshops and events** as an active member of the **IEEE Student Branch**, fostering collaboration and innovation.
- Volunteered as a **mentor for undergraduate students**, providing guidance on coding and **data analysis projects.**