NAITIK SHAH

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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, XML, Git, JSON

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

TensorFlow, Keras

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

- Working on Salesforce CRM solutions to streamline workflows and improve user engagement, utilizing Apex and Lightning Web
 Components (LWC).
- Learning to design, develop, and optimize Salesforce applications tailored to organizational needs.
- Building a foundational understanding of automation tools such as workflows, process builders, and validation rules.

Software Engineer, Hexaware Technologies Pvt. Ltd., Mumbai, India

August 2022 - July 202.

- Developed and maintained software applications for various clients using Java, J2EE, and Spring framework, achieving 95% code coverage through comprehensive unit testing.
- Designed and executed responsive front-end components leveraging HTML, CSS, JavaScript, and AngularJS, resulting in a 20% improvement.
- Integrated front-end with back-end services using RESTful APIs, ensuring seamless data flow and optimal user experience.
- Leveraged Java frameworks like **Spring Boot** and **Hibernate** for building scalable and efficient **server-side components**, reducing application response time by **30%**.

Software Developer Intern, Orno Infosys India, Mumbai, India

October 2019 – September 2020

- Volunteered in developing a software application that automated employee payrolls, standard business, management reporting and
 payment processing.
- Utilized knowledge and skills in developing web applications and user interface design, resulting in a 15% increase in user adoption.
- Applied Eclipse as the Integrated Development Environment (IDE) for development and debugging.

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.