

# BHUVAN SHAH

bhuvansh@usc.edu | (213) 331-1360 | [bhuvannnn.github.io/tech-portfolio/](https://github.com/bhuvannnn/tech-portfolio) | [linkedin.com/in/bhuvanshah/](https://www.linkedin.com/in/bhuvanshah/) | [github.com/Bhuvannnn](https://github.com/Bhuvannnn)

## EDUCATION

**University of Southern California** Los Angeles, California  
**Master's of Science in Computer Science** May 2025

- *Coursework:* Analysis of Algorithms, Database Systems, Applied Natural Language Processing, Advanced Mobile Devices and Consoles

**Indus University** Ahmedabad, India  
**Bachelor's of Computer Science and Engineering | CGPA 9.63/10** August 2019-May 2023

- *Coursework:* Data Science, Machine Learning, Differential Equation and Linear Algebra, Computer Systems Architecture, Operating Systems, Computer Network, Cloud Computing, Web Technology

## TECHNICAL SKILLS

*Languages:* Python, SQL, Deep Learning, Machine Learning, HuggingFace, Transformers, Statistical Learning, LSTM, JavaScript, Java, C#, React, Node.js

*Technology:* Pytorch, SciKit, Git, Power BI, Tableau, TensorFlow, Hadoop, Spark, Flask, Django, GCP, AWS, NoSQL, MongoDB

## EXPERIENCE

**University of Southern California** Los Angeles, California  
**Teaching Assistant – Advanced Mobile Devices and Game Consoles** May 2024 - Present

- Facilitated 180+ students through office hours, guiding on C#, Python, and R coding, and delivered key lectures on course concepts, graded assignments with detailed feedback, developed 6+ in-class coding activities, and supported the integration of analytics into games through Firebase and Unity Analytics

**Prompt Softtech** Ahmedabad, Gujarat  
**Data Scientist Intern** December 2022-May 2023

- Impacted 12 traders by achieving 93% accuracy with a custom LSTM neural network with bifurcated architecture using stock prices and Twitter sentiment polarity
- Reached 95% average accuracy by enhancing performance through building and fine-tuning technical indicators
- Generated over \$1200 in trading profits by boosting accuracy to 95.6% through comprehensive backtesting and refining indicators with MQL4/MQL5

**Tornado Computer** Ahmedabad, Gujarat  
**Data Analyst Intern** June 2021-July 2021

- Attained 92% accuracy in performance optimization by leveraging algorithms and IoT to optimize hardware performance and predict system failures
- Reduced downtime and repair costs by 87% through implementing a neural network for predictive maintenance using sensor data from hardware sensors and logs

**Vueinternational** Ahmedabad, India  
**Software Developer Intern** June 2020-October 2020

- Delivered a 15% increase in user engagement by designing and implementing interactive components with React, Tailwind CSS, Node.js and Express.js with MongoDB to facilitate efficient data retrieval
- Enhanced transaction security by 20% through integrating secure credit card transactions with Stripe API

## ACADEMIC PROJECTS

**PII Detection and Masking | PyTorch, DeBERTaV3, Transformers, MongoDB** USC, Los Angeles, CA  
**Team Leader** January 2024-May 2024

- Achieved a 99.56% F-Beta Score by developing a DeBERTaV3-based NER system with advanced architecture, integrating a dense layer and softmax activation for improved accuracy in PII detection
- Expanded detection capabilities from 10-15 to 94 PII tags, surpassing traditional rule-based systems by optimizing training with a dynamic learning rate schedule and advanced token-level prediction

**Forecast Finesse: Analysing stock performance | LSTM, BeautifulSoup, Streamlit, Tweepy** Ahmedabad, India  
**Personal Project** December 2022-May 2023

- Performed sentiment analysis system on live Twitter feed and Google News using a customized NLTK combined with BeautifulSoup for webscraping resulting in 92% accuracy excluding nuances such as sarcasm
- Developed a dashboard with live streaming of data from Yahoo Finance, tweets and GoogleNews, polarity sentiment scores resulting in 24% increase in profitability of users

**Analysing Student Marks | Machine Learning, Google Colab** Ahmedabad, India  
**Team Leader** November 2021-December 2021

- Engineered a robust analytical model with dimensionality reduction techniques, curating a subset of key variables to classify individual performance statuses and plan personalized learning, getting 80% increase in student's academics