

BHUVAN SHAH

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EDUCATION

University of Southern California	Los Angeles, California
Master's of Science in Computer Science	May 2025
<ul style="list-style-type: none"><i>Coursework:</i> Analysis of Algorithms, Database Systems, Applied Natural Language Processing, Advanced Mobile Devices	
Indus University	Ahmedabad, India
Bachelor's of Computer Science and Engineering GPA 4.0	August 2019-May 2023
<ul style="list-style-type: none"><i>Coursework:</i> Data Science, Machine Learning, Cloud Computing , Differential Equation and Linear Algebra, Computer Systems, Operating Systems, Computer Network, Web Technology	

TECHNICAL SKILLS

Languages: Python, SQL, Deep Learning, Machine Learning, Transformers, LSTM, JavaScript, Java, C#, React, Node.js, SpringBoot
Technology: Pytorch, SciKit, Git, Power BI, Container, Flask, BigQuery, Django, GCP, AWS S3, Azure, MySQL, Computer Vision, MongoDB, GCP, Hadoop, TerraForm, Kuburnetes, CI/CD pipelines & workflows

EXPERIENCE

University of Southern California	Los Angeles, California
<i>Graduate Teaching Assistant</i>	May 2024 - Present
<ul style="list-style-type: none">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 Softech	Ahmedabad, Gujarat
<i>Data Scientist Intern</i>	December 2022-May 2023
<ul style="list-style-type: none">Impacted 12 traders by achieving 93% accuracy with a custom LSTM neural network with bifurcated architecture using stock prices and Twitter sentiment polarityLeveraged Hadoop to manage and process large datasets exceeding 50 GB, achieving a 35% reduction in data retrieval timeGenerated over \$1200 in trading profits by optimizing trading strategies using Apache Spark for real-time data processing and model validation, complementing MQL4/MQL5 backtesting	
Tornado Computer	Ahmedabad, Gujarat
<i>Data Analyst Intern</i>	June 2021-July 2021
<ul style="list-style-type: none">Attained 92% accuracy in performance analysis by leveraging Apache Kafka for real-time data streaming and IoT integration, optimizing hardware performance and predicting system failuresReduced downtime and repair costs by 87% through implementing a neural network on TensorFlow for predictive maintenance, processing sensor data with Apache Airflow to automate data pipeline orchestration	
Vueinternational	Ahmedabad, India
<i>Software Developer Intern</i>	June 2020-October 2020
<ul style="list-style-type: none">Delivered a 15% increased business impact by designing and implementing interactive components with React, Tailwind CSS, Node.js, and Express.js, while integrating Redis for efficient data caching and MongoDB for data retrievalEnhanced transaction security by 20% through Docker-containerized Stripe API integration for secure transactions	

PROJECTS

PII Detection and Masking PyTorch, DeBertaV3, Transformers, Natural Language Processing, LLM	Los Angeles, CA
<ul style="list-style-type: none">Led a team of 5 people and achieved a 99.56% F-Beta Score by developing a DeBERTaV3-based NER system with advanced architecture along with embedding layers and in-context learning to enhance PII detection accuracyExpanded detection capabilities from 15 to 94 PII tags by leveraging Elasticsearch for scalable data storage and search. Integrated reinforcement learning with TensorFlow to optimize training, improving user data privacy	
Me, Myself and Time Unity, C#, Python, Tableau, Git, APIs, Data Visualization, Version Control	Los Angeles, CA
<ul style="list-style-type: none">Enhanced player experience by implementing a unique time-traveling mechanic, resulting in a 25% increase in engagement, as measured by player retention rates, with the game played nearly 10,000 times on the live build.Improved game analytics by integrating detailed heatmaps and stacked bar diagrams, achieving a 30% boost in level completion rates through data-driven design adjustments and reducing player restart rate by 20%	
Forecast Finesse: Analysing stock performance BeautifulSoup, Streamlit, Data mining, Time series forecasting	Ahmedabad, India
<ul style="list-style-type: none">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 sarcasmDeveloped a dashboard with real-time data streaming from Yahoo Finance, tweets, and Google News using Azure Stream Analytics, resulting in a 24% increase in user profitability	
Analysing Student Marks Machine Learning, Google Colab, Probability, Statistical Modeling	Ahmedabad, India
<ul style="list-style-type: none">Engineered a robust analytical model with dimensionality reduction techniques to identify 10 key performance indicators; this targeted approach resulted in an 80% improvement in student academic performance across diverse learning environments	