

# BHUVAN SHAH

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## EDUCATION

<b>University of Southern California</b>	Los Angeles, California
<b>Master's of Science in Computer Science</b>	May 2025
<ul style="list-style-type: none"><li><i>Coursework:</i> Analysis of Algorithms, Database Systems, Applied Natural Language Processing, Advanced Mobile Devices</li></ul>	
<b>Indus University</b>	Ahmedabad, India
<b>Bachelor's of Computer Science and Engineering   CGPA 9.63/10</b>	August 2019-May 2023
<ul style="list-style-type: none"><li><i>Coursework:</i> Data Science, Machine Learning, Differential Equation and Linear Algebra, Computer Systems Architecture, Operating Systems, Computer Network, Cloud Computing, Web Technology</li></ul>	

## TECHNICAL SKILLS

*Languages:* Python, SQL, Deep Learning, Machine Learning, HuggingFace, Transformers, LSTM, JavaScript, Java, C#, React, Node.js  
*Technology:* Pytorch, SciKit, Git, Power BI, Tableau, TensorFlow, Hadoop, Spark, Flask, Django, GCP, AWS S3, NoSQL, MongoDB, Data Visualization, Statistical Learning, GCP

## EXPERIENCE

<b>University of Southern California</b>	Los Angeles, California
<b>Graduate Teaching Assistant – Advanced Mobile Devices and Game Consoles</b>	May 2024 - Present
<ul style="list-style-type: none"><li>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</li></ul>	
<b>Prompt Softech</b>	Ahmedabad, Gujarat
<b>Data Scientist Intern</b>	December 2022-May 2023
<ul style="list-style-type: none"><li>Impacted 12 traders by achieving 93% accuracy with a custom LSTM neural network with bifurcated architecture using stock prices and Twitter sentiment polarity</li><li>Reached 95% average accuracy by enhancing performance through building and fine-tuning technical indicators</li><li>Generated over \$1200 in trading profits by boosting accuracy to 95.6% through comprehensive backtesting and refining indicators with MQL4/MQL5</li></ul>	
<b>Tornado Computer</b>	Ahmedabad, Gujarat
<b>Data Analyst Intern</b>	June 2021-July 2021
<ul style="list-style-type: none"><li>Attained 92% accuracy in performance optimization by leveraging algorithms and IoT to optimize hardware performance and predict system failures</li><li>Reduced downtime and repair costs by 87% through implementing a neural network for predictive maintenance using sensor data from hardware sensors and logs</li></ul>	
<b>Vueinternational</b>	Ahmedabad, India
<b>Software Developer Intern</b>	June 2020-October 2020
<ul style="list-style-type: none"><li>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</li><li>Enhanced transaction security by 20% through integrating secure credit card transactions with Stripe API</li></ul>	

## PROJECTS

<b>PII Detection and Masking   PyTorch, DeBertaV3, Transformers, MongoDB, Natural Language Processing, LLM</b>	Los Angeles, CA
<ul style="list-style-type: none"><li>Led a team of 5 people and 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</li><li>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</li></ul>	
<b>Me, Myself and Time   Unity, C#, Python, Tableau, Data Analysis</b>	Los Angeles, CA
<ul style="list-style-type: none"><li>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.</li><li>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%</li></ul>	
<b>Forecast Finesse: Analysing stock performance   LSTM, BeautifulSoup, Streamlit, Tweepy</b>	Ahmedabad, India
<ul style="list-style-type: none"><li>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</li><li>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</li></ul>	
<b>Analysing Student Marks   Machine Learning, Google Colab</b>	Ahmedabad, India
<ul style="list-style-type: none"><li>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</li></ul>	