github.com/vns9
linkedin.com/in/venkat-narayana

SHANMUKHA VENKAT NARAYANA

+1 (213) 373-0020
vsnaraya@usc.edu

EDUCATION

Los Angeles, CA	University of Southern California	Aug 2022–May 2024

- Master of Science in Computer Science
- Coursework: Analysis of Algorithms, Data Science for Machine Learning

Varanasi, India	Indian Institute of Technology (BHU)	Aug 2017–May 2021

- Bachelor of Technology in Computer Science with Honors in Artificial Intelligence. GPA: **9.1/10**

EXPERIENCE

Software Engineer	JPMorgan Chase & Co.	Jun 2021–Aug 2022

- Designed and built a web application that filters expiring futures contracts and allows the Portfolio manager to roll them.
- Developed a latency and app health monitor that does automated checks and alerts the team as per incident severity. This app saves approximately 100 hours of manual work in a year.
- Implemented an entire scalable Blazemeter test suite for a new Orders management workflow that discovered multiple critical latency and payload size discrepancies.
- Upgraded tech (Spring Boot, JUnit5, Mockito) in 7 legacy microservices without a single production incident.
- Identified six major production issues on rotational production support, did root cause and impact analysis based on Datadog traces, Splunk logs.
- Worked on technologies Java, Spring Boot, Python, React, JMeter, Apache Groovy, Blazemeter, Datadog, Splunk

Software Engineer Intern	JPMorgan Chase & Co.	Jun 2020–Jul 2020

- Spearheaded a team of 5 in building an Indian Sign language translator app under Tech for Social Good initiative.
- Captured facial and palm gestures through webcam and processed them using MediaPipe to interpret the signing by leveraging pattern recognition models with an LSTM+AutoEncoder architecture.
- Architected the complete pipeline using Django, MediaPipe, JavaScript, Bootstrap

Software Engineer Intern	4iq	May 2018–Jul 2018

- Designed and coded the front-end and back-end for loans-management system and on-boarded more than 200 clients from existing Funds management software.
- Utilized technologies Django, Bootstrap, SQLite, HTML/CSS

PROJECTS

- **Hash-based hybrid recommender system** *Python, TensorFlow, SLURM (Supercomputer)* [Code]
  Proposed and implemented an end-to-end deep learning-based Hybrid recommender system that utilizes reviews to generate hash codes for prediction and ranking tasks. Outperforms baseline model by 5% in MSE accuracy.
- **Cartoon generation using Generative Adversarial Network** *Python, PyTorch, OpenCV, Flask* [Code]
  Created a deep learning GAN model to generate cartoons from real-life portraits. Leveraged a Genetic algorithm-based training strategy for deciding the hyperparameters.
- **COVID-19 Cases Tracker** *React, JavaScript, RESTful APIs* [Demo]
  Developed a Coronavirus tracker using crowdsourced RESTful APIs to visualize COVID cases that show country-wise statistics.
- **Semantic search engine** *Python, Django, Gensim, NLTK, Scikit* [Code]
  Built a document search engine that retrieves relevant text documents leveraging topic models extracted from medical text corpus from Latent Semantic Indexing.

SKILLS

- Java, C, C++, Python, JavaScript, Spring Boot, Django, React, PyTorch, MySQL, Git, HTML, CSS

ACHIEVEMENTS

- Received the KVPY Fellowship award 2016 from the Indian Institute of Science, Bangalore.
- Secured All India Rank 793 in IIT (JEE) Advanced 2017 out of 1.3 million applicants.
- Secured Rank 154 in Andhra Pradesh EAMCET 2017 (Engineering) out of 200K applicants.
- Hackathons: JPMorgan Code For Good 2021, Microsoft Code.Fun.Do 2019, CodeFest IIT(BHU) 2020