

# NIKITA HEMANT KODKANY

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## EDUCATION

### University of Southern California

Master of Science, Computer Science

[Coursework: Machine Learning, Natural Language Processing, Deep Learning, Algorithms]

JAN 2023 – DEC 2024

Los Angeles, CA

### KLS Gogte Institute of Technology

Bachelor of Engineer, Computer Science

AUG 2018 – JUL 2022

India

## TECHNICALS SKILLS

**Programming:** Python (Flask, Django), C/C++, Java, SQL, R

**Frameworks:** scikit-learn, TensorFlow, PyTorch, NumPy, Pandas, Seaborn, Matplotlib, PySpark, Streamlit, nltk

**Tools & Tech:** Apache (Hadoop, Spark, HIVE, Airflow), Snowflake, AWS (Redshift, Sagemaker, S3), Microsoft (Azure, Power BI), QlikSense, Tableau, Hue, Docker, Terraform, Git, UNIX, LINUX

## EXPERIENCE

### Keck Medicine of USC

APR 2023 – Present

**Data Science & Analytics Intern** | QlikSense, Tableau, PowerBi, SQL, Hue, AWS, Python

Los Angeles

- Converted 3 dashboards (QlikSense to Tableau), achieving 20% reduction in processing time across all visualizations
- Engineered health indicators (including SEDoH) from 40M+ EHR data; developed ML models for predicting length of stay and mortality using AWS Redshift
- Crafted SQL queries for validation across databases (QlikSense, Hue) and dashboards (Snowflake, PowerBI)
- Built ML models to forecast business financial trends using demographic and procedure code data from EHR system

### Mercedes Benz Research And Development India

JUL 2022 – DEC 2022

**Data Engineer** | HIVE, PySpark, Databricks, PyTorch, HuggingFace, Azure, Python

Bangalore, India

- Resulted in 5% improvement in efficiency for car engine data pre-existing ETL pipeline using PySpark on HIVE tables
- Automated manual effort by engineering Machine Learning pipeline employing LLMs for patent classification; integrating CI/CD pipeline for deployment and monitoring
- Presented insights on Signal Processing in Machine Learning for the Automobile domain to over 50 attendees

### Eyesec Cyber Security Solutions

DEC 2021 – JUL 2022

**Machine Learning Engineer** | nltk, Spacy, PyTorch, TensorFlow, NumPy

Belagavi, India

- Spearheaded Machine Learning pipeline for industry-aligned university syllabus generation exploiting 50,000+ web-scraped job descriptions, analyzing 100+ universities, improved job relevancy by 30%
- Authored Machine Learning course, featuring 7 projects and 5 internships, guiding 80% participants engagement

### Cognius.ai

SEP 2021 – MAY 2022

**Machine Learning Engineer** | Python, PyTorch, NLG, NLU, Optuna, GCP AI Platform

Remote

- Led research for Natural Language Generation pipeline using Google's T5, implementing custom named entity (NER); conducted A/B testing on model configurations, resulting in a 14% improvement in pipeline accuracy
- Enhanced pipeline accuracy by 14% through fine-tuning IBM Watson's API with hyperparameter optimization for Natural Language Understanding tasks

## PROJECTS

### Prediction of Individuals' Influence on Community Dynamics | Python, nltk, PyTorch, NLP

- Developed large language model to predict social media engagement metrics injecting tweets and Reddit discussions, outperforming MLP and LSTM models by 30% to predict influence of individual on large audience
- Fine-tuned BERT for sentiment analysis and embeddings; obtained 20% reduction in prediction error

### Sunglass Hub Dataflow | Azure, Terraform, Airflow, Docker, Python, Insomnia, PostgreSQL

- Implemented end to end ETL pipeline to scrape, process, and store data from Sunglasses API
- Delivered validated data to Azure Synapse using Terraform, Airflow, Docker, Insomnia, PostgreSQL; enabled data visualization, providing insights into sales trends, customer preferences, and inventory management

### Urban Area Reconstruction using GAN | Python, TensorFlow, PyTorch, GAN, CycleGAN, OpenStreetMap

- Architected CycleGAN model to generate high-resolution urban reconstructions from satellite imagery and OpenStreetMap data; enabled visualization of city growth and infrastructure expansion
- Augmented reconstruction accuracy by integrating building density, roads, and green spaces; used transfer learning and data augmentation