Polukonda Kavya Tejaswi

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EDUCATION

Indiana University Bloomington, *Indiana, U.S.* Aug 2021 - Present
Master of Science in Computer Science.

SHRI VISHNU ENGINEERING COLLEGE, Andhra Pradesh, India July 2017 - July 2021
Bachelor of Technology in Computer Science and Engineering.

TECH SKILLS

Programming	:	Java, Python, JavaScript, R-Language.
Web	:	RESTful APIs, SQL, HTML, CSS, Bootstrap, jQuery, Hibernate.
Cloud/Tools	:	Git, Linux, Docker, Kubernetes, CI/CD, AWS.
Libraries (Python)	:	Pandas, NumPy, Scikit-learn, Seaborn, Matplotlib, TensorFlow.

WORK EXPERIENCE

Indiana University Bloomington, Bloomington, Indiana Aug 2022 – Present
Graduate Research Assistant (Under the guidance of Prof. Jonathan Helm - Kelly School of Business)

- Strived to test different combinations of features about SK data, US homicide data(MAP data), and other victim datasets as options in a prediction model to predict whether a Serial-Killer(SK) is operating in a region.
- Leveraged database/SQL skills, python to implement relevant data processing techniques to handle differences in data representations, schemas, and inconsistencies and performed exploratory data analysis.
- Performed theoretical analysis of various predictive modeling techniques, and currently testing a Custom Logistic Regression model (using clearance rate and CPD) on data to identify SK activity based on SK trends.
  Advanced Skills: Python, Visualization (seaborn, matplotlib, etc.), Pandas, NumPy.

Indiana University Bloomington, Bloomington, Indiana Jan 2022 – May 2022
Graduate Associate Instructor (Meaning and Form in HCI by Prof. Maryam Heidaripour for the course)

- Assisting the professor with the course by creating/reviewing lecture slides, readings, grading the assignments, holding weekly office hours etc.
- Apart from supervising and mentoring the assigned group of 20 students, helped the entire class of 60 students with their projects throughout the semester (synchronous and asynchronously via emails).
- Lead the efforts in organizing coursework by coordinating with teaching teams to streamline discussion sessions.

PROJECTS

Hospitality Portal

- Developed a full-stack application with OAuth integration, React frontend, and microservices based Spring boot backend.
- Performed sanity testing using Postman and performance testing using JMeter for all backend APIs.
- Deployed on Heroku cloud platform and ensured scalability, reliability, disaster recovery etc.

Predicting the Chronic Kidney Disease (CKD) in Hospitalized Patients using Classification

- Predicted chronic kidney disease using several machine learning algorithms such as Decision Tree, Naïve Bayes, Logistic Regression, Support Vector Machine (SVM), Random Forest, K-Nearest Neighbors, and Neural Network and to select the most efficient one to assess the extent of CKD in patients

Predicting the mileage of a vehicle using Regression techniques (Python)

- Enriched Used multiple linear regression model to predict the best mileage car by building a linear relationship between mileage and characteristics such as horsepower, top speed, volume, and vehicle weight as input variables. Eliminated undesirable characters based on VIF (Variance Inflation Factor) and collinearity.