## SINDHU RAVIKUMAR

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## **Data Scientist**

Proficient in data acquisition and data engineering, statistical analysis, machine learning, deep learning, and NLP. With a background in graphics, I bring strong skills in visual data analytics and creative feature engineering that help find interesting narratives in data and make insightful predictions.

# **SKILLS**

Python, HTML/CSS, OOP, Git, SQL, Postgres, NumPy, Pandas, Apache Spark, Scikit-learn, Keras, NLP, Nltk, Matplotlib, Seaborn, Geopandas, Illustration, Graphic Design, 3D Digital Design, Motion Graphics, Video Editing

#### **SOFTWARE**

Jupyter Notebooks, DataBricks, Visual Studio Code, Tableau, Adobe Photoshop & After Effects, Maya, Zbrush, Microsoft Office

#### **TECHNICAL PROJECTS**

## **Student Performance Predictions - Github**

Predict if students answer incorrectly or correctly on questions with an Artificial Intelligent tutor developed at RIIID Labs

- Utilized Postgres to store the AI tutor data into a SQL database to save space and used SQL queries for efficiency
- Used Tableau and Seaborn for data visualization and understanding
- Engineered new features from data using Pandas and Numpy to improve model predictions
- Predicted student answers with Scikit-learn models, the best model being a Random Forest Classifier

## Movie Recommender - Github

Recommend movies to users with collaborative and content based filtering

- Engineered data using Apache Spark to handle big data
- Visualized data using Seaborn and Wordcloud for data understanding
- Created a collaborative-based recommender model using ALS from pyspark
- Created a content-based recommendation engine using Scikit-learn functions and NLTK for NLP

# **Tanzanian Water Well Status - Github**

Predict if water points in Tanzania are functional, functional but needs repair, or nonfunctional

- Used Pandas for data cleaning and engineering
- Visualized relevant features with Seaborn and Geopandas for data understanding
- Tried various machine learning methods from Scikit-learn and more, using recall as the main error metric of interest
- Light Gradient Boosting model by Microsoft yielded best prediction results

# **EMPLOYMENT HISTORY**

3D/Motion Graphics for Marketing, High 5 Games, New York, NY

05/2016 - 08/2016

- Incorporated Motion Graphics using Adobe After Effects, Photoshop, and Illustrator for promotional videos
- Utilized Maya for 3D asset production for advertisements

3D Graphics Intern, **Dreamworks**, Bangalore, India

05/2009 - 08/2009

- Trained in Animation techniques (Autodesk Maya)
- Assisted all departments with administrative tasks

# **VOLUNTEER WORK**

Graphic Designer, Sankara Eye Foundation, San Jose, CA

2007 - Present

Designed flyers, posters, and invitations for fundraising events with Adobe Photoshop

#### **EDUCATION**

Flatiron School, New York, NY

08/2020 - 12/2020

Immersive 15 week Data Science Bootcamp program

Rochester Institute of Technology, Rochester, NY

08/2012 - 05/2016