Sudip Pandey, Ph.D.

San Diego, CA 92122
Phone: 618.303.8327 | Email: physpandey@gmail.com
Website: /SudipPandey | LinkedIn: /SudipPandey | GitHub: /SudipPandey

Data analyst/scientist with 4+ years of experience in analyzing data of different US National Labs with a background in applied physics. Earned a certificate from University of California San Diego Data Science Boot Camp. Experienced in Python, Pandas, Sciket-Learn, Tensorflow, data visualization tools such as JavaScript, Tableau, and D3.js., and both SQL and NoSQL databases (PostgreSQL, MongoDB). Passionate about learning new things and techniques as well as employing knowledge and skills to yield solutions to various challenges. Enjoys leveraging background and skill set to support detailed and efficient analysis.

Technical Skills

Languages: Python, R, JavaScript, MATLAB, C, HTML5, SQL, NoSQL
Applications: GitHub, MongoDB, MySQL, PostgreSQL, GIT, Flask, Command Line, Tableau, KNIME, Power BI, Heroku, AWS, Hadoop
Tools: Excel, VBA, Pandas, NumPy, SciPy, Seaborn, Scikit-Learn, Matplotlib, Seaborn, Keras, TensorFlow, Spark, Databasing, web scraping, SQLAlchemy, PyMongo, Origin, IgorPro

Education

Certificate, Data Science: University of California San Diego, USA   **2021-2022**
A 24-week intensive program focused on gaining technical programming skills in Excel, VBA, Python, R, JavaScript, SQL Databases, Tableau, Big Data, and Machine Learning.
PhD in Applied Physics: Southern Illinois University Carbondale, IL USA.   **2015 –2018**
MS in Physics: Southern Illinois University Carbondale, IL USA   **2013 –2015**
MSc in Physics: Tribhuvan University, Kathmandu, Nepal   **2009 –2012**
BSc in Physics (Major), Computer Science (Minor): St. Xavier's College, Nepal   **2005 –2009**

Projects

US Agriculture | GitHub | Website
The purpose of this project is to developed an interactive map and dashboard that contain various information about agriculture products across the USA
- Role: Leader
- Tools: HTML5, CSS, JS, Leaflet.js, JavaScript, Flask API, Bootstrap, python, pandas, pymongo, Jupyter Notebook, Census API, Weather API,

Credit Risk Evaluation | GitHub | Website
Built a model to predict whether a loan will become high risk or not
- Role: Leader
- Tools: API, Python, NumPy, Seaborn, Matplotlib, Scikit learn, Jupyter Notebook, HTML5, CSS, Flask API, Bootstrap
- Best model is Logistic Regression

Housing Price Prediction | GitHub | Website
Predict the housing price for each zip code or city in USA
- Role: Leader
- Tools: API, Python, NumPy, Seaborn, Matplotlib, Scikit learn, Jupyter Notebook, HTML5, CSS, Flask API, Bootstrap
- Best model is Random Forest Regressor which has a mean absolute error of around $27000.

Professional Experience

University of California, San Diego   Feb. 2019 – present
Postdoctoral Scholar   San Diego, CA
- Successfully analyzed neutron data from different US National Labs (Oak Ridge National Laboratory, NIST)
- Developing model for analyzing synchrotron x-ray data from different US National Labs (Argonne National Laboratory, Brookhaven National Lab, Berkeley National Lab)

Southern Illinois University Carbondale   Oct. 2013 – Dec. 2018
Research Assistant   Carbondale, IL
- Analyzed and published large data of magnetic materials at Low temperature solid state laboratory with Outstanding Dissertation Award
- Discovered perfect materials for magnetic refrigeration by analyzing x-ray and magnetization data with Outstanding Master Thesis Award

Certification

Python Programming Certificate, UC San Diego, Machine Learning with Python, IBM, Machine Learning Scientist with Python, Data Camp

Honors and awards

- Outstanding Dissertation Award, Southern Illinois University, Carbondale (2020)
- Outstanding Master's Thesis Award, Southern Illinois University, Carbondale (2015)
- Doctoral Fellowship, Graduate School, Southern Illinois University, Carbondale (2017)
- Graduate School, Dissertation Research Award, SIUC (2018)
- Willis Swartz Award (2017)