

PARIDHI CHOUDHARY

Apt. 6, 2- Bayard Rd, Pittsburgh, Pennsylvania - 15213 | Phone: +14126189918 | paridhi@andrew.cmu.edu

Education

Carnegie Mellon University

Master of Information Systems Management (3.7/4.33)

Pittsburgh, Pennsylvania

May 2018

Indian Institute of Technology Bombay

Bachelor of Technology in Metallurgical Engineering and Material Science (7.5/10.0)

Mumbai, India

May 2013

Work Experience

Graduate Teaching Assistant, Advanced Relational Database Management

Pittsburgh, USA, Jan – Mar 2018

Integrated Decision Systems, Data Science Intern | Forecast Modeling

Singapore, May – July 2017

- Improved model forecast accuracy by 51% using characterization of inter-order duration and change point analysis
- Enhanced model robustness by including Decision Tree (CART & CTree) and LSTM neural networks on top of GLM models
- Lowered RMSE by 80% by implementing hyper parameter optimization and creating an ensemble of regression and LSTM models
- Developed the data pipeline including SQL scripts, python and R scripts to pre-process, analyse and predict from raw data

Credit Suisse, Credit Risk Analyst | Risk Management

Mumbai, Aug 2014 – July 2016

- Managed processes to calculate wrong way risk quantifying potential future exposure due to Counterparty-Trade relation
- Developed Regression models and historical simulation which improved accuracy by 45% over correlation matrix
- Optimized SQL queries, ensuring efficient use of data tables and temporary datasets which reduced run-time by 30%
- Automated daily monitoring applications using VBA removing manual supervision from 80% of the processes

Deloitte Touche Tohmatsu, Analyst | Management Consultancy

Mumbai, June 2013 – July 2014

- Supply Chain and business re-engineering for World's leader in Confectionary resulting in cost-savings solutions, higher profits
- Optimized supply chain network to reduce operational costs, In-Vehicle travel time & network length; developed a model in C++
- Built an excel based model to rationalize salesforce - regression model helped identify the degree of rationalization pan-India

Key Projects

Classification of Handwritten Digits using Neural Networks [Git Repo Link](#)

Aug 2017 – Dec 2017

- Implemented the layers of a CNN (in Python) based on the LeNet architecture to classify 10,000 digits from the MNIST dataset
- Trained CNN on 60,000 digits, using Stochastic Gradient Descent (accuracy of 99.04%) and analysed loss function behaviour

Classification of IMDB Movie Reviews [Git Repo Link](#)

Aug 2017 – Dec 2017

- Modelled, developed and trained 2 classifiers – Logistic Regression using Gradient Descent and Naïve Bayes to classify reviews
- Utilized movie reviews (1500-word vocabulary) from the IMDB Large Movie Review dataset by Mass et. al to assess the classifier accuracy as a function of the MAP and MLE parameter estimates

Database Design and Management, CMU

Sep 2017 – Oct 2017

- Designed a database schema and implemented database system to support business operations of a home builder website
- Enforced integrity, enterprise, domain constraints and database level authentication for permissions to view/modify data
- Developed procedures, triggers, scheduled jobs using PL/SQL for consistency, provided SQL scripts to generate reports
- Prepared a Data Warehouse Migration Guide, identifying FACT and dimensions for potential migration to data warehouse

Skills

Languages: SQL, PL/SQL, Python, R, Java, Scala, Spark, Kafka, Samza

Courses:

Computer Science: Algorithms and Data Structures, Machine Learning, Applied Data Science, Cloud Computing, Android Application Development

Statistics: Statistical Inference, Modern Regression, Probability and Stochastic Processes, Linear Regression and Time Series, Categorical Data Analysis

Leadership and Achievements

Entrepreneurship Cell, IIT Bombay

2011-2012

- Enabled angel investments of \$18 million in 2 start-ups through Pitch it!-Start-up funding platform
- Negotiated 23 logistics & media deals, including Indian Express, worth \$30,000 (35% YOY growth)
- "Certificate of Leadership" by National Entrepreneurial Network, funded by Wadhvani foundation