ARNAV KUNDU

(979) 739-7337 • arnav1993k@tamu.edu • www.linkedin.com/in/arnavkundu-tamu

EMPLOYMENT

Citigroup Inc.

Data Scientist *July 2016 – July 2017*

- Designed marketing campaigns for Citibank Thailand by applying time-series forecasting and classification algorithms like SVM and KNN on spend patterns and other customer demographics.
- Strategized customer outreach and base expansion with marketing teams by building statistical models on spend allocation to increase customer base by 3% every month for Citibank Thailand.
- Designed and maintained 'Covenant' a campaign management framework with online dash-boarding and customer level performance tracking which helped the marketing teams to be updated with their portfolios.
- Awarded the ARC Award in 2016 for optimizing 'Covenant' for Citibank Thailand which increased the campaign conversion rate by 12% in the last quarter of 2016.

Citigroup Inc.

Application Developer *July 2015 – July 2016*

- Developed packages like live trade status monitor, form generators for CitiFXPulse, an online FX trading platform.
- Developed JavaScript based APIs for parsing server responses into interactive dashboards that led to a better user experience.
- Enhanced rate receive and update service to reduce the latency of FX rate update from 20 microseconds to 8 microseconds.

FINISAR Malaysia, Chemor, Perak, Malaysia

Intern, Test and Development *May – July 2014*

- Doubled the production per station by expediting the temperature settling process of opto-electronic trans-receivers by developing an algorithm to tune the PI parameters of the temperature controller.
- Designed an architecture to interface multiple source-meters(Keithley-2400) to a computer.

PROJECTS

Graduate Projects

Anomaly detection in dense network using Deep Neural Networks (keras, scikit-learn, matplot-lib, Python, Hadoop)

- Developing a cyber-threat monitoring system using a deep neural networks based anomaly detection system on a big data platform.
- The project involves analysis of the system at normal conditions and comparing it with localized system fluctuations when system is under attacks.

Drillbotics (keras, scikit-learn, matplot-lib, Python, MATLAB)

- Developing a rig drilling machine that detects the material it is drilling through and optimizes its drilling speed accordingly using neural networks for Drillbotics competition.

Multiple Object and Text Detection in an Image (opencv, keras, matplot-lib, nltk, Python, numpy)

- Developing an application to recognize words and pictures of objects drawn on a sketchboard using Tensorflow's Convolution Neural Networks for image segmentation and nltk for word sequencing.

Bitcoin Price Forecast (Scipy, statsmodels, Python, scikit-learn, matplot-lib, numpy, pandas)

- Developed a mechanism to predict Bitcoin prices using Polynomial Regression, ARIMA and Recurrent neural networks.

Appliance monitoring system using Deep Neural Networks (keras, Python, matplot-lib, numpy, pandas,NILMTK)

- Developed a CNN and LSTM based algorithm to monitor appliances in a house from the main meter data.

SKILLS

Programming languages – C, Java, Python(*numpy, pandas, scikit-learn, scipy, keras, nltk, opencv*), SAS, Hadoop Map Reduce, HIVE, SQL, MATLAB, Teradata.

Web Development- HTML5, CSS, JavaScript, JQuery.

Machine Learning- Classification and Regression, Clustering**,** Time-series, hypothesis testing, and dimensionality reduction, Neural Networks.

Misc- Excel with VBA, Tableau, ETL design, A/B Testing

EDUCATION

Texas A&M University, College Station, TX

Masters of Electrical and Computer Engineering(Information Sciences), GPA- 3.7 *May -2019*

National Institute of Technology Karnataka, Surathkal, India

Bachelors of Electrical and Electronics Engineering, GPA- 3.4 *May -2015*

Relevant courses:- Machine Learning, Data science in Power Systems, Stochastic Systems, Convex Optimization, Linear Algebra, Probability Theory