

Narendra Jhabakh

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Education

- Expected May 2016 **Dual Master of Science**, *Carnegie Mellon University*, Pittsburgh, PA, **CQPA** : 3.84.
Engineering and Technology Innovation Management (EPP), Advanced Infrastructure Systems (CEE)
◦ *Graduate Teaching Assistant* - 12:421 *Engineering Economics*
◦ *Relevant Coursework*- Risk Management, Machine Learning, Real Options.
- May 2014 **Bachelor of Technology**, *Indian Institute of Technology*, Bhubaneswar, **CGPA** : 8.67.
Civil and Environmental Engineering

Work Experience

- Summer '15 **Market Analyst**, *Saros Intelligence*, Washington DC.
◦ Built a model that implements Technology diffusion for IoT in the Energy Sector. The Model uses Regression for prediction and the predicted values are fit to a sigmoid function.
◦ The most relevant **Dependent Variables** were found out based on predicted results, using a loss function.
- Summer '15 **Research Assistant**, *Carnegie Mellon University*, Pittsburgh, PA.
◦ Built a model that **predicts Power Consumption** based on time of day and outdoor air-temperature.
◦ **Anomaly Detection** was done based on a threshold calculated using **k-fold cross-validation** on the error(RSS).
◦ Implemented a technique for appliance characterization by analysing the frequency of Light intensity using **Short Time Fourier Transform**, under the domain of **Non-Intrusive Load Monitoring (NILM)**.
- Summer '13 **Research Intern**, *Tohoku University*, Sendai-ku, Japan.
◦ Created response curves from accelerometer data pertaining to each floor of the test building. Load vs Displacement curves for each floor of test building as an effective Load vs Deflection curve were analysed using the Capacity Spectrum Method.

Projects

- Oct '15 - **Image Classification**, *Carnegie Mellon University*, Pittsburgh, ([Code and Report](#)).
Present ◦ The project aims at **classifying images** from the CIFAR-10 dataset using concepts from Machine learning.
◦ Features were extracted using techniques like HOG and SIFT. These features were classified using algorithms including **Naive Bayes**, **Bag of Words with K-Means**, **Logistic Regression** and **Support Vector Machines**.
◦ The accuracy of prediction was improved using **Boosting** and **Voting** methods.
- Sept '15 - **Supply Chain Risk**, *Carnegie Mellon University*, Pittsburgh, ([Report](#)).
Nov '15 ◦ Modelled a network using **BISZSIMZ SIP**(Strategic Inventory Planning) which calculates the **Safety Stock** to be held at the various stages in the Supply Chain. The model takes **Lead Time variability** into consideration.
◦ Redesigned the existing Supply chain and implemented **Complete Chain Network Configuration** to incorporate partial flexibility to meet demands.
- Jan '15 - **Business Model and Commercialization**, *Carnegie Mellon University*, Pittsburgh, ([Report](#)).
April '15 ◦ Technology commercialization of a new product was carried out by modelling both Costs and Demand.
◦ Analysis on Market Demand was performed using a Linear Logit model.
◦ On integration of Supply and Demand, the **Effective plant size** with the **Profitable price** were recommended.
- Sept'14 - **All things Financial**, *Carnegie Mellon University*, Pittsburgh, ([Report](#)).
Oct'14 ◦ In this project, the correlation of **stock prices** and their corresponding **search query** counts was analysed.
◦ The method serves as a good measure for firms where the end user is the common man.

Computer skills

- Languages Python, MATLAB, Octave, \LaTeX , R, SQL, Java, C++
Tools Windows, Mac OS, Linux, LabView, Tableau, BIZSIMZ

Awards and Leadership

- Hackathon **Winners**, conducted by *ENERNOC*.
Leadership Conducted a workshop at Ranganathan University for students as part of a Mentorship Program.
Interests Yoga, Golfing, Dancing, Soccer.