



Experience

- **Data Science Intern - Overstock.com**, Salt Lake City, UT Jun 2017 - Sept 2017
 - Optimized the Baseline (non-promoted) Sales Prediction models for the Online Retailer.
 - Developed ML Regression models, learning on sometimes extremely sparse data and still achieved a reduction in Error by about 40% over their existing Prediction models.
- **Graduate Teaching Assistant - University of Utah**, Salt Lake City, UT Aug 2015 - May 2016
 - Assisted 12 students in Lab activities and held the responsibility of grading for over 140 students.
- **Asst. Systems Engineer - Tata Consultancy Services Ltd.**, Hyderabad, India Jan 2014 - Jul 2015
 - Optimized monitoring of Application servers and dependent scheduled jobs by creating several Shell scripts. This helped us reduce the number of Incidents raised.
 - Supported the IT infrastructure during Change Request cycles, Performed *jar* deployments on hosts, provided on-call support to ensure efficient Disaster Recovery and Troubleshooting of Application/Infrastructure issues in Production, DR and UAT environments.
- **Undergraduate Intern - Centre for AI and Robotics**, Bengaluru, India May 2012 - Jul 2012
 - Improved upon a Tree Climbing Robot, which was developed for use in military surveillance.

Education

- **Master in Robotics - University of Utah** Salt Lake City, UT
Dept. of Mechanical Engineering, College of Engineering, GPA : 3.23 Aug 2015 - May 2017
- **Bachelors in Mechatronics - Jawaharlal Nehru Technological University** Hyderabad, India
Dept. of Mechanical Engineering, Mahatma Gandhi Inst. of Tech., GPA : 3.3 Aug 2009 - May 2013

Skills

Languages : C++, Python, MATLAB, Bash Shell, UNIX, SQL, Teradata, R, Power Excel

Libraries : NumPy, pandas, Matplotlib, scikit-learn, OpenCV, Box2D

Projects

- **Predicting an airlines stock price based on its on-time performance** Dec 2016
 - Considered raw real on-time performance data and raw stock trend data of American Airlines over a period of 13 months. The data was featurized as per our need.
 - Trained several Machine Learning classifiers like Random Forests, Support Vector Machines, etc. to predict stock prices of future and were able to predict if there would be an increase or decrease in Stock Prices with **75% accuracy**. [rajivmantena.net/ml.pdf]
- **Motion planning for a Sheep-Dog** Dec 2015
 - We tried to explore the problem space of planning the motion of a dynamic body by influencing it with another dynamic body. To explore the problem space, we applied this to the sheep dog problem where we program the robotic dog to herd the sheep towards the goal.
 - The problem of moving an object (or a set of objects) to a desired goal state by influencing the object (or a set of objects) to be moved using another object that already has a notion of where the goal is location has been addressed. [rajivmantena.net/mp.pdf]
- **Building a Fusion Deposition Modelling Machine** Mar 2013
- **Study and Optimization project on Tree Climbing Robot** Jul 2012
- **Wireless Home Automation System with control via Smartphone** Jan 2012