#### Contact

www.linkedin.com/in/neerajagrawal (LinkedIn)

# Top Skills

R

**Analytics** 

SAS E-Miner

# Languages

English

Hindi

## Certifications

R for Excel Users

edX Honor Code Certificate for Predictive Analytics

ADVANCED MODELING AND SIMULATION OF POWER ELECTRONIC SYSTEMS USING PLECS

edX Honor Code Certificate for Statistical Thinking for Data Science and Analytics

Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization

#### Honors-Awards

**GE Analytics Certificate** 

**Innovator Award** 

**Champions Award** 

Above and Beyond Achievement Award

N R Khambhati Memorial Gold Medal

### **Publications**

Startup Diagnostics for an LCL Filter in an Active Front End Converter

Optimal Health Care Inventory Management Using Analytics

# Neeraj Agrawal

Sr. Data Scientist | Machine Learning | Deep Learning Bengaluru, Karnataka, India

# Summary

Industrial data scientist solving challenging and competitive industrial problems. Masters in electrical engineering, with a specialization in power electronics. Skilled in data mining, statistical data analysis, predictive modeling, programming. Passionate about building high-quality, practical data-driven solutions.

I joined Edison Engineering Development Program (EEDP), rotation-based technical leadership program. EEDP equipped me with strong problem-solving and technical acumen. EEDP helped me evolve as industrial data scientist by giving me an opportunity to work with world-class domain expert together with nourish my software and analytics skills through rotation in different teams across different businesses.

GENERAL SKILLS: power electronics; data science & statistics, predictive analytics; programming; strong communications.

#### COMPUTING SKILLS:

Analytics tools: R, Python, Scala, Tableau, SAS Base, SAS Enterprise Miner, JMP, SQL, Matlab, Octave, C, Java Basics;

Big Data Tools(Basic Knowledge):Pig, Sqoop, Hive, Hbase, Hadoop, Spark;

Power Electronics Tools: DSP, FPGA, Sim Power (MATLAB), PSIM, PLECS;

Platforms: Mac, Linux/Unix, MS Windows.

# Experience

Walmart Labs
Senior Data Scientist
January 2019 - Present (1 year 3 months)
Bengaluru Area, India

### **Patents**

DFIG Based hybrid AC/DC Distribution and Protection Scheme for Marine Architecture.

**ROUTE EXAMINATION SYSTEM** 

Prediction of Main Alternator Failure.

Honeywell Technology Solutions, Inc.

Data Scientist

November 2016 - January 2019 (2 years 3 months)

Bangalore

### **GE Transportation**

3 years 3 months

Analytic Domain Engineer October 2015 - October 2016 (1 year 1 month) Bangalore, India

- Predictive modeling and data mining of GE Locomotive Systems using domain expertise analytics, anomaly detection, fault detection & prognostics on heterogeneous multivariate industrial-scale time series.
- Help new talent in the team to get equipped with analytics concepts and tools.

### Edison Engineer

August 2013 - September 2015 (2 years 2 months)

I joined Edison Engineering Development Program (EEDP), rotation-based technical leadership program.

#Rotation1: Aux and Traction Control Team(GE Transportation) [Aug2013 - Mar2014]

- Involved in design aspect of traction alternator for locomotive to reduce THD in output voltage.
- Involved in hardware in loop (HIL) real time testing for validation of locomotive controls.

#Roation 2: Power System and Conversion Lab (Global Research Center) [Apr2014- Dec2014]

- Developed the experimental test-bed consisting of three power inverters emulating UPS

units connected in the IP ring bus architecture, to test the control algorithm. I was

appreciated and was recognized with an "above and beyond silver award".

- Demonstrated the capability of Typhoon HIL simulator by comparing with the hardware

result for output voltage control for non-linear load.

#Rotation 3: Data Analytic Team [Jan2015 - Sep2015]

- Developed an analytical model to predict the failure of Auxiliary and Traction Alternator in locomotive.
- Analyzed, developed and validated predictive model for Air Compressor Leakage System.
- Developed an prescriptive model for maintenance of Traction Motor prognostics.

Department of Electrical Engineering, IISc Bangalore Laboratory Teaching Assistant August 2012 - December 2012 (5 months)

Bangalore, India

Lab TA for the course Power Electronics. Responsible for guiding and helping students to perform laboratory exercises and testing and maintenance of lab equipments.

Automation & Control Systems Summer Trainee June 2010 - July 2010 (2 months) Chinchwad Pune

- -Underwent ISA-CIAT (The Instrumentation, Systems & Automation Society) Training Programme.
- -Extension Training on PLCs (AB/Siemens/Mitsubishi/Messung), MMI, SCADA, Drives, IEC language

# Education

Indian Institute of Science

Master of Engineering (MEng), Electrical Engineering Technologies/ Technicians · (2011 - 2013)

Harcourt Butler Technological Institute

Bachelor's Degree, Electrical and Electronics Engineering (2007 - 2011)