

## EDUCATION

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- **The National Institute of Engineering** Mysore, India  
*Bachelor of Engineering in Electronics and Communication; CGPA: 8.82/10.0* *Aug. 2015 – July. 2019*

## EXPERIENCE

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- **Indian Institute of Technology Kanpur** Kanpur, IND  
*Senior Project Associate, Full time* *Nov 2020 - Present*  
I worked on 5G NR PHY layer algorithm development for sub-6 and mm-wave systems in MATLAB
- **Coursera** Mountain View, CA  
*Senior Software Engineer* *Jan 2014 - Oct 2016*
  - **Notifications:** Service for sending email, push and in-app notifications. Involved in features such as delivery time optimization, tracking, queuing and A/B testing. Built an internal app to run batch campaigns for marketing etc.
  - **Nostos:** Bulk data processing and injection service from Hadoop to Cassandra and provides a thin REST layer on top for serving offline computed data online.
  - **Workflows:** Dataduct an open source workflow framework to create and manage data pipelines leveraging reusables patterns to expedite developer productivity.
  - **Data Collection:** Designed the internal survey and crowd sourcing platform which allowed for creating various tasks for crowd sourcing or embedding surveys across the Coursera platform.
  - **Dev Environment:** Analytics environment based on docker and AWS, standardized the python and R dependencies. Wrote the core libraries that are shared by all data scientists.
  - **Data Warehousing:** Setup, schema design and management of Amazon Redshift. Built an internal app for access to the data using a web interface. Dataduct integration for daily ETL injection into Redshift.
  - **Recommendations:** Core service for all recommendation systems at Coursera, currently used on the homepage and throughout the content discovery process. Worked on both offline training and online serving.
  - **Content Discovery:** Improved content discovery by building a new onboarding experience on coursera. Using this to personalize the search and browse experience. Also worked on ranking and indexing improvements.
  - **Course Dashboards:** Instructor dashboards and learner surveying tools, which helped instructors run their class better by providing data on Assignments and Learner Activity.
- **Lucena Research** Atlanta, GA  
*Data Scientist* *Summer 2012 and 2013*
  - **Portfolio Management:** Created models for portfolio hedging, portfolio optimization and price forecasting. Also creating a strategy backtesting engine used for simulating and backtesting strategies.
  - **QuantDesk:** Python backend for a web application used by hedge fund managers for portfolio management.

## PROJECTS

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- **QuantSoftware Toolkit:** Open source python library for financial data analysis and machine learning for finance.
- **Github Visualization:** Data Visualization of Git Log data using D3 to analyze project trends over time.
- **Recommendation System:** Music and Movie recommender systems using collaborative filtering on public datasets.

## PROGRAMMING SKILLS

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- **Languages:** Scala, Python, Javascript, C++, SQL, Java      **Technologies:** AWS, Play, React, Kafka, GCE