# Sourabh Bajaj

http://www.sourabhbajaj.com

#### Education

•	Georgia Institute of Technology
•	Master of Science in Computer Science; GPA: 4.00

# Birla Institute of Technology and Science

Bachelor of Engineering in Electrical and Electronics; GPA: 3.66 (9.15/10.0)

#### EXPERIENCE

## Google

Software Engineer

- **Tensorflow**: TensorFlow is an open source software library for numerical computation using data flow graphs; primarily used for training deep learning models.
- Apache Beam: Apache Beam is a unified model for defining both batch and streaming data-parallel processing pipelines, as well as a set of language-specific SDKs for constructing pipelines and runners.

# Coursera

Senior Software Engineer

- 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 platfowm which allowed for creating various tasks for crowd sourding 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 Coursesa, 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

Data Scientist

- **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

- 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

• Languages: Scala, Python, Javascript, C++, SQL, Java

Technologies: AWS, Play, React, Kafka, GCE

Email : mail@website.com Mobile : +1-123-456-7890

> Atlanta, GA Aug. 2012 - Dec. 2013

Pilani, India Aug. 2008 - July. 2012

Oct 2016 - Present

Mountain View, CA

Jan 2014 - Oct 2016

Atlanta, GA

Summer 2012 and 2013

Mountain View, CA