

# Apratim Biswas

Work Authorization: Permanent Resident (Green Card)

352-872-2490 | Tampa Bay Area, FL (Open to Relocation)

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## DATA SCIENTIST | DATA ANALYST

I'm a Data Scientist and an experienced R&D Engineer with a background in Materials Engineering. I'm very passionate about working with large and complex datasets, finding patterns, developing models, and translating data into stories with actionable intelligence. I'm also experienced in leading diverse teams, engaging internal and external stakeholders, and implementing process innovations.

### Core Competencies

- Data Science
- Cloud Computing
- Machine Learning
- Data Visualization
- Communication Skills
- Data Engineering
- Data Analysis and Analytics
- Exploratory Data Analysis (EDA)
- Inferential and Predictive Modeling
- Relationship Management

## TECHNICAL PROFICIENCIES

<b>Platforms</b>	Linux   Windows   Google Cloud Platform   IBM Cloud   Google Colab
<b>Tools</b>	Python   SQL   BigQuery   Tableau   Power BI   Pandas   Numpy   Scikit-Learn   Keras   TensorFlow   Microsoft Excel   Jupyter Lab   Matplotlib   Streamlit   Minitab   REST API   Git
<b>Portfolio</b>	<a href="#">Tableau Public</a>   <a href="#">GitHub</a>   <a href="#">Medium</a>   <a href="#">Personal Webpage</a>

## PROFESSIONAL EXPERIENCE

**Data Science Immersive Fellow**, General Assembly, Remote from DC (8/2020 to 11/2020)

Completed a full-time intensive Data Science program. Gained hands-on experience analyzing real-world big data sets and modeling them using various machine learning algorithms. I also added to my experience in exploratory data analysis and translating data to meaningful stories. List of selected data science projects:

- Listening to customers is central to a successful enterprise. However, digesting large volume of reviews, say >50,000, whether from one product or multiple lines of products and services is challenging. Using natural language processing, I developed a tool to:
  - i) Cluster customer reviews based on their content. This helps us learn about customers.
  - ii) Extract high-level information for each cluster at the topic level from the feedback. Such information can help us improve and/or enhance products/services.
- Developed a model using natural language processing to classify any randomly selected comment as belonging to one of two very similar subreddits. Model classified comments accurately 96% times.

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**Metallurgist and R&D Engineer, Gopher Resource, Tampa, FL (9/2012 to 3/2019)**

Led corporate research and development, including creating mass balance models and furnace feeds to improve sustainability and enhance production models. Oversaw process development from lab scale through full production. Managed large plant-scale floor experiments and oversaw process engineering design and operational improvements. Facilitated root cause analysis. Supervised external process consultants.

- Designed and implemented process improvements that delivered 80% increase in selenium yield in lead and 90% decrease in selenium in discharged water.
- Developed and implemented new process to make solid waste 'slag' created in smelting process non-hazardous, resulting in >70% decrease in hazardous slag.
- Improved lead production outputs with root cause analysis on low production in special circumstances.
- Developed new procedures to collect and analyze accurate data from process design through implementation and maintenance.

**Graduate Research Fellow, University of Florida, Gainesville, FL (8/2007 to 12/2011)**

Conducted research on the development of processes to synthesize  $\text{TiO}_2$ - $\text{SiO}_2$  nanofibermats for use in the lunar environment, including synthesis and characteristic of nanofibers and filtration properties. Developed processes to make more flexible fibermats in comparison to ceramic fibers in use at the time. Taught undergraduates in materials science and engineering.

**EDUCATION****Ph.D. in Materials Science and Engineering, 2012**

University of Florida, Gainesville, FL

Research: Electrospun ceramic fibermats for filtrations application in lunar environment

**B.S. in Metallurgy and Materials Engineering, 2007**

Indian Institute of Engineering Science and Technology, Shibpur, West Bengal, India

**IBM Data Science Professional Certificate, 2020**