### Contact

www.linkedin.com/in/aishwaryasrinivasan (LinkedIn) www.youtube.com/channel/ UCzd4ZN716evEjtbJERBMTfg (Blog)

www.instagram.com/ the.datascience.gal/ (Personal) www.illuminate-ai.org/ (Company)

### Top Skills

Personal Branding Responsible Al Data Science

# Languages

Malayalam

Tamil

**English** 

Hindi

## Certifications

Professional Certification: Level 1 - Certified Data Scientist

IBM Intellectual Capital/ Intellectual Property Creator

IBM Recognized Teacher/ Educator

Enterprise Design Thinking Practitioner

Google Cloud Certified Professional Machine Learning Engineer

#### **Publications**

"Data Science as a Service on cloud platform"

"Inheritance of handwriting features"

Reinforcement Learning - The Business Use-cases

"Hybrid cloud for educational sector"

"Era of cloud computing - a new insight to hybrid cloud"

### **Patents**

# Aishwarya Srinivasan

Data Scientist (GenAl)- Google Cloud | LinkedIn Top Voice Data & Al | Top 10 Women in Al | EB1A "Einstein Visa" Recipient | 440k+ Followers

San Francisco Bay Area

# Summary

Deep Learning Researcher || Scikit-Learn Contributor || Data Science || Statistical Machine Learning || Reinforcement Learning || Algorithm Optimization || Specialization - Al in Finance || Speaker || Thought Leader

All the posts reflect my own views and do not represent my employer.

Aishwarya is working as a Data Scientist in the Google Cloud AI Services team to build machine learning solutions for customer use cases, leveraging core Google products including TensorFlow, DataFlow, and AI Platform. Prior to this, Aishwarya was working as an AI & ML Innovation Leader at IBM Data & AI, where she was working cross-functionally with the product team, data science team and sales to research AI use-cases for clients by conducting discovery workshops and building assets to showcase the business value of the technology. She is the founder of Illuminate AI, first of its kind non-profit organization for providing resources and mentorship for people who want to build their career in the field of AI. She is an advocate for open-source technologies, presently an open source Developer Advocate for Deepchecks; previously a developer advocate for PyTorch Lightning and a contributor to Scikit Learn.

Aishwarya has been awarded Trailblazer of the Year by Women in Al in 2022 and Women of Influence by Business Journal in 2022.

She holds a post-graduate in Data Science from Columbia University. She has worked with clients all across the globe and has traveled internationally to London, Dubai, Istanbul, and India to lead and work with them. She is very focused on expanding her horizons in the machine learning research community including her recent

Machine Trading using Reinforcement Learning

Patent Award won in 2018 for developing a Reinforcement Learning model for Machine Trading.

She is an ambassador for the Women in Data Science community, originating from Stanford University. She has over 420,000 follower base on LinkedIn and actively organizes events and conferences to inspire budding data scientists. She has been spotlighted as a LinkedIn Top Voice 2020 for Data Science and AI, which features Top 10 Machine Learning influencers across the world.

She is an ardent reader and has contributed to the scholastic community. To spread her knowledge in the space of data science, and to inspire budding Data Scientists, she actively writes blogs related to machine learning on LinkedIn and Instagram: https://www.instagram.com/the.datascience.gal

Besides being a data junkie, she is a fitness fanatic who is into martial arts(Krav Maga) and yoga. https://www.instagram.com/the.datascience.gal

# Experience

### Google

Data Scientist - Google Cloud Al January 2022 - Present (1 year 7 months)

- Working on building solutions using Large Language Models and Generative Al capabilities on Google Cloud- GenAl Specialist
- Customer-facing Data Scientist, building machine learning solutions for customer use cases leveraging core Google Cloud AI platform and services.
- Collaborating cross functionally with product team to perform industry research on machine learning use-cases and building technical assets for end-to-end pipelines
- Co-leading initiatives for building tools for Responsible AI workflows
- Led a team to develop Data Quality Assessment Framework to be widely used in Google Cloud AI teams
- Working on demand forecasting models, MLOps pipelines, personalization models, DocAl, and VisionAl models, across retail, banking and manufacturing industries (confidential customers)

• 20% – Working as a PM with the product team to develop features in Vertex Al platform (confidential)

Illuminate AI
Founder | Mentor
March 2021 - Present (2 years 5 months)
California, United States

First of its kind volunteer mentorship platform for folks in Artificial Intelligence! Illuminate - AI is a platform built to connect people from the Artificial Intelligence Community. We believe knowledge grows by sharing. We are driven to connect mentors, who would like to give to the community, to mentees, who are seeking guidance and motivation. The mentorship program is not limited to a senior individual mentoring a novice but is it also open to peer-mentorship.

There is a lot to learn!

A platform is also for sharing thoughts and ideas in the space of Artificial Intelligence and its applications in real-world use-cases.

Playlists available are Weekend Musings, Al Guild, What's Tuning and Cracking Data Science Interviews.

O'Reilly Media Technical Reviewer - Editorial Board April 2021 - Present (2 years 4 months)

Stanford Deep Data Research Computing Center Senior Data Scientist July 2022 - December 2022 (6 months)

Deepchecks
Open Source Developer Advocate
April 2022 - December 2022 (9 months)

AIM Leaders Council
Member
November 2021 - December 2022 (1 year 2 months)

Al for Good Foundation Advisory Board Member July 2021 - December 2022 (1 year 6 months) International Association of Engineers
Member
July 2021 - December 2022 (1 year 6 months)

The Al Education Project
Advisory Board Member
June 2021 - December 2022 (1 year 7 months)

San Francisco Bay University Advisory Board Member May 2022 - November 2022 (7 months)

IBM

3 years

Al & ML Innovation Leader - Business Development April 2021 - January 2022 (10 months) San Francisco Bay Area

- Building Data and AI capabilities of Cloud Pak for Data, IBM Lead with offerings and partnerships by building data science and machine learning models to cater to the broader client, sales, and partner communities.
- Worked cross functionally with product team, data science team and sales to research AI use-cases for clients by conducting discovery workshops and building demo assets to showcase the value of IBM Cloud services
- Lead a team to generate new opportunities by proposing new features for IBM Cloud Data & Al product offerings based on industry research and fostering broader client, and product analytics
- Leading post-signature activities for CSM, to ensure client projects are begun quickly and seamlessly.

Data Scientist - Data Science & Al Elite February 2019 - April 2021 (2 years 3 months)

- New York, United States
- -Working on 6-8 week client engagements to implement SoA (state of the art) machine learning models, and integrate them into their organizational workflow to put Al into action.
- Led engagements with clients from multiple industries like health, finance, intergovernmental organizations (United Nations), non-profit organizations, international government bodies.

- -Managed cross-border client accounts and traveled to London, Dubai, Istanbul, Mumbai, and multiple states within the United States.
- -Submitted a patent for building a novel reinforcement learning model for machine trading.

PyTorch Lightning
Open Source Developer Advocate
October 2020 - July 2021 (10 months)
New York, New York, United States

Goldman Sachs
Data Scientist (Capstone)
September 2018 - December 2018 (4 months)
Greater New York City Area

Capstone project via Columbia University (With Jared Peterson @ Goldman Sachs)

Developing a model for finding the Similarity Indexes of various Medical Institutes based on their clinical trial data using the open source AACT Database. (Text analytics and exploring alternative data)

IBM Data Science and Advanced Analytics
Data Science and Machine Learning Intern
June 2018 - December 2018 (7 months)
Greater New York City Area

Developing Reinforcement Learning Model for Long & Short Trading and Portfolio Management.

Columbia University Irving Medical Center Graduate Research Assistant June 2018 - December 2018 (7 months) Greater New York City Area

Working on patient's EHR and time series data of heart rate, blood pressure and patient's health response during the operation. The goal is to develop a forecasting model to detect the seizure of patients; using multi-level model. The time series data would be analyzed using dynamic time warping methods due to varying lengths and unequal intervals of the data.

Data Science Institute, Columbia University

1 year

Scikit Learn Contributor April 2018 - December 2018 (9 months)

Greater New York City Area

Graduate Research Assistant January 2018 - May 2018 (5 months) Greater New York City Area

Analysis and extension of scikit-learn (Guide: Prof. Andreas Mueller)

Scikit-learn is a Python machine learning library containing a large collection of machine learning models, as well as evaluation metrics and tools for implementing machine learning workflows.

The goal of this project is to analyze the current usage of scikit-learn on a large scale (i.e. the scale of all open-source code, even all public code), and extend the library based on the findings; to identify usage patterns, problematic use cases, and ways to improve the interface.

Columbia Business School Research Assistant September 2017 - January 2018 (5 months) Greater New York City Area

iTech Mission Pvt. Ltd. Data Scientist Intern May 2017 - June 2017 (2 months)

New Delhi Area, India

During my internship as a Data Scientist I accomplished the following tasks:

- Data collection and extraction using various websites like World Bank, UNDP, UNICEF etc.
- Data filtering
- Data visualizations using D3js predominantly along with Microsoft Power BI, Tableau and Adobe Photoshop for Info graphics.
- Writing tech blog correlating topics like GST, BRICS Meet, Ocean Conference, Planet 50-50 with SDGs.
- Extensive reading and research on data and whitepapers in SDG 13 and 14: Climate Change and Life below water respectively.

Whilst my term, we worked on the project of 'The Ocean Conference Challenge' as well, for data analytics and visualization, for which we were awarded by the UN-DESA.

Mereex Services Pvt Ltd - India Machine Learning Intern December 2016 - May 2017 (6 months) New Delhi, Delhi, India

Microsoft
Machine Learning Intern
May 2016 - July 2016 (3 months)
Hyderabad Area, India

- Worked with the Bing Team for Machine Learning and NLP.
- Worked on developing a Skype ChatBot for Redmond Campus, fulfilling 6 broad criteria.
- Coordinated with the Redmond team for understanding the functional and technical requirements.
- Worked with BotFramework in Microsoft Visual Studio (C#) on Azure, Cognitive services, Bing Maps, NLP, luis.ai, REST APIs and machine learning.

International Management Institute - IMI Data Analyst Intern January 2016 - February 2016 (2 months) New Delhi Area, India

- Did extensive research on capacity utilization of goods and Index of Industrial Production.
- Read many research papers and company white papers to gain knowledge.
- Made theoretical hypothesis regarding the IIP growth, and to prove the hypothesis, did data analytics.
- The analytics included Time Series and Wharton Index of Growth for Capacity Utilization of Goods in Indian Industry using Index of Industrial Production.

National Informatics Centre - India
Data Research Analyst Intern
December 2015 - February 2016 (3 months)
Delhi

- Data set of a restaurant-customer ratings was collected through internet sources. (data.gov.in)
- The analysis had to be done to find the dependent factors which influence the overall rating, food rating and service rating of the restaurant.
- Predictive analysis needs to be applied to find response of customer in a different scenario.
- In the pre-processing of the dataset, qualitative information was converted to quantitative data; including data cleaning. The dataset was converted into multiple table using the database approach- entity relationship diagram.
- Supervised learning methods of correlation, linear regression and ANOVA was done. Later, unsupervised learning method was also applied. Unsupervised learning does not use previously known results to train its models. Rather, it uses descriptive statistics to examine the natural patterns and relationships that occur within the data and does not predict a target value.
- Another data set of Mutual Fund Performance for 8 years was collected.
- The growth rates of the mutual fund are influenced by various factors, which are mostly indirect, like the technological development in industries, industrial growth, gross profit margin in the industry etc. in which the mutual fund company has invested its bonds. For the customer to buy a mutual fund bond, the Net Value of the bond should be high, so as the person who is investing gets higher returns.
- For the purpose, predictive and time series analysis was applied for model generation.

#### EY

Social Media/Business Analyst Intern January 2015 - August 2015 (8 months)

Virtual

The company hired me for social media and business analytics- highly confidential.

- The dataset was entirely generated by extracting information from the Twitter profile of the clients for whom the analytics was performed. For the purpose, Twitter Streaming API (text mining) was used.
- The data was wired to the RStudio using twitteR library and the analytics was coded using R language.
- Various analytical methods were applied, namely, word cloud where an image composed of words used in a particular text or subject, in which the size

of each word indicates its frequency or importance; sentiment analysis which is a process of computationally identifying and categorizing opinions expressed in a piece of text, especially in order to determine whether the writer's attitude towards a particular topic, product, etc. is positive, negative, or neutral.

- Later User Activity Monitoring (UAM) was also performed to visualize the activeness of the user in making posts, sharing posts, liking and commenting using info graphics.
- All the data inferences were converted into one-sliders which consisted of all information as graphics for each client being inspected.

International Management Institute - IMI Market Data Analyst Intern June 2015 - July 2015 (2 months) New Delhi Area, India

I did the project with Dr. Neena Sondhi, who has a diverse 20+ years of diverse experience of teaching, research and consultancy. An alumnus and a merit holder from the Faculty of Arts, University of Delhi, she has successfully managed senior administrative roles in the organization.

The project was co-mentored by Dr. Chhavi Mehta who is a professor in IMI. She has completed her PhD from IIT, Delhi and has done Empirical Financial and Accounting Research Program from IIM, Calcutta.

- A survey was conducted among various Stock market investors to analyse their investment behavior.
- The data collected was converted from qualitative to quantitative for ease in analysis. Data cleaning and pre-processing was performed.
- The aim of the project was to analyse and build models for Customer Satisfaction and Profit Prediction & Enhancement for Stock Market.
- The analysis was done using IBM SPSS.

Tata Consultancy Services Market Data Analyst Intern March 2015 - May 2015 (3 months) Chennai

- Data from NSE and BSE websites of Sensex and Nifty was collected.
- Data values of various parameters like gold rates, industrial production, textile rates, mining etc were extracted.
- The purpose was to find a relationship, as to how the growth or decline in various industries can effect the Sensex and Nifty rates to go up or down.
- Predictive modeling using regression and time series analysis was applied.

- The analysis was done in IBM SPSS.

Tata Consultancy Services
Research And Development Intern- Cloud Computing
December 2014 - January 2015 (2 months)

New Delhi Area, India

- I worked for the client DirecTV, USA for modeling their transmission via cloud platform.
- Extensive research was done to understand the encryption algorithms, video streaming, real time transmission using cloud computing etc.
- A cloud architecture was designed to do receive data from satellite, perform video encryption and transmit it in real time to the receiver set top boxes.

### Delhi University

Research And Development Intern- MATLAB development June 2014 - July 2014 (2 months)

New Delhi Area, India

- Extensive research on forensic science and handwriting analysis was done.
- Handwriting features and their dependency with the human personality was studied.
- A survey was conducted where uniform handwriting samples of families were collected, father, mother, grandparents, kids and siblings; in order to analyse upon the characteristics of handwriting that are inherited.
- Later, a software was developed using MATLAB, where handwriting text can be recognized, similar to OCR and handwriting features like slant, kurtosis, skewness, margin gap, inter-word and inter-line spaces were analysed.
- Our research and the results were well-appreciated by a lot of researchers, and we got our work published in International Refereed Journal of Engineering and Science.

#### HP

Student Internship

February 2014 - March 2014 (2 months)

Chennai, Tamil Nadu, India

#Internship in finance and management as a core subject

- # Software application and working techniques involving business strategies.
- # Focus on social entrepreneurship and cash flow during profit and loss in businesses.

# Other aspects like conducting interviews, communication techniques and inventory management. Preparation of excel sheets for break-even point calculation, cash flow, energy auditing and income statement.

# Education

Columbia University in the City of New York

Master of Science - MS, Data Science · (2017 - 2018)

Vellore Institute of Technology
Bachelor of Technology (B.Tech.), Computer Science and
Engineering · (2013 - 2017)