#### Contact

+65 8402 0800 (Home) aishwaryaprabhat@gmail.com

www.linkedin.com/in/ aishwaryaprabhat (LinkedIn) www.aishwaryaprabhat.com/ (Personal) towardsdatascience.com/ @aishwaryaprabhat (Blog) github.com/aishwaryaprabhat (Other)

## Top Skills

Artificial Intelligence
Machine Learning
Software Engineering

# Languages

English

Hindi

### Certifications

Monitoring and Alerting with Prometheus

Product Management: Become a Product Manager & Get the Job

API Technical Writing 2: REST for Writers

Microservices introduction for Data Science

Fundamentals of Kubernetes

#### Honors-Awards

**Exemplary Intern Award** 

Top Poster and Presentation (Augmented Reality Troubleshooting) - HP Innovation Fair

Student Leader Award

#### **Publications**

Augmented Reality Troubleshooting 'Court Trial For Print Quality'; Adjudicating the alleged culprits of graininess

# Aishwarya Prabhat

Senior Data Scientist @ Shopee | Ex - Nvidia, A\*STAR, HP Inc | I architect and build end-to-end Data Science, ML and Al solutions Singapore

# Summary

The first two letters of Aishwarya's name are "Al" and Al (Artificial Intelligence) and Machine Learning are what he is passionate about. He is a full stack Data Scientist who loves building Machine Learning and Al products. Aishwarya possesses a strong foundation of skills and knowledge in Al, ML and Software Engineering. He is also an excellent communicator and loves sharing ideas through lectures, keynotes and blog posts. Aishwarya is a driven individual and a zealous team-player, with a growth mindset and positive attitude.

# Experience

Shopee

2 years 9 months

Senior Data Scientist July 2020 - Present (10 months) Singapore

#### Machine Learning Platform

- Architecting and building end-to-end Machine Learning solutions, by leveraging MLOps and Software Engineering technologies such as Docker, Kubernetes, CI/CD tools, AirFlow, KubeFlow etc.
- Building critical infrastructure such as HA Kubernetes clusters for training, UAT, testing and production, both on-premise and on cloud (GCP)
- Building full stack AI/ML products such as data labelling tools and other supporting solutions such as monitoring & logging solutions, load balancing solutions and identity & access management solutions
- Establishing Site Reliability Engineering practices in ML product lifecycles across all of Shopee's Data Science solutions
- Managing team's project management process, milestones, goals and progress
- Establishing standards, documentation and training Shopee's 100 over Data Scientists in essential technologies such as containerisation using Docker, container orchestration using Kubernetes, git, CI/CD and API design

# Data Scientist August 2018 - July 2020 (2 years)

Singapore

#### Category Recommendation

- Built a Deep Learning model that uses a fusion of image and language features for classifying a multi-modal input
- Improved previous model drastically by using (the then) state-of-the-art techniques such as attention, bi-directional LSTMs and YOLO
- Built ETL and model retraining pipelines

#### Peak Concurrent User Prediction

- Built and producitonized a Machine Learning model for predicting peak concurrent user traffic on Shopee platform using digital attribution data
- Led this cross-functional project and managed resources and stakeholders from Marketing, Data Engineering, Tech Ops and Data Science teams
- Brought project from conception to production in 7 months
- Built ETL and model re-training pipelines

Towards Data Science
Machine Learning, Al and Data Science Writer
January 2020 - Present (1 year 4 months)
Singapore

- https://medium.com/@aishwaryaprabhat
- Most 'popular' article has 40k+ views and 2.8k+ claps

#### **NVIDIA**

Research Associate (Artificial Intelligence)
January 2018 - August 2018 (8 months)
Singapore

- Conducted Deep Learning experiments to investigate the utility of CapsuleNets in Natural Language Processing (NLP) tasks such as machine translation, text classification and text generation
- Implemented CapsuleNet architecture for NLP tasks in TensorFlow
- Wrote Python scripts, libraries and packages for text pre-processing tasks such as text format conversion, tokenisation, lemmatisation, embeddings generation for downstream Deep Learning NLP tasks
- Conducted training for Nvidia's R&D Engineers on fundamentals of NLP and CapsuleNets

### HP

Artificial Intelligence (R&D) Engineer

### May 2017 - September 2017 (5 months)

Singapore

- Pioneered the development of an Al-based document classification system to be integrated into HP's printing and scanning technologies
- Curated a dataset, built ETL pipelines and trained Deep Learning models for document classification
- Filed patent invention disclosure for aforementioned system

#### HP

5 months

#### R&D Engineer

May 2016 - September 2016 (5 months)

Singapore

- Analyzed and designed image processing algorithms and developed methods to quantify and improve print image quality
- Published findings in a peer-reviewed conference (HPICS'16, Vancouver, USA)
- Wrote Python scripts to automate data collection and processing

### Augmented Reality Developer

May 2016 - September 2016 (5 months)

- Pioneered the development of augmented reality Android applications for troubleshooting HP printers
- Published invention in a peer-reviewed poster conference and won top 10 posters award (only intern to publish and win top 10)

SUTD-MIT International Design Centre Undergraduate Researcher - Virtual Reality January 2016 - August 2016 (8 months)

SUTD-MIT International Design Centre

#### Virtual/Augmented Reality

- Built knowledge graphs in virtual reality space
- Integrated technologies such as gaming engines such as Unity and Oculus Rift
- Developed VR and AR applications as Android applications
- Project was featured by Temasek for the Ecosperity Young Leaders' Conference

Singapore University of Technology and Design (SUTD) Assistant Researcher - Nanotechnology September 2015 - May 2016 (9 months)

#### Piezoelectric Nanofiber-based

#### **Devices**

- Developed Python programs using OpenCV for analysing images of nano fibres obtained from analogue and digital microscopes
- Conducting experiments to investigate humidity sensing capabilities of porous and non-porous KNo fibre-based humidity sensing device
- Optimised collection method of aligned nano fibres

# Education

Georgia Institute of Technology

Master of Science - MS, Computer Science · (2020 - 2022)

Singapore University of Technology and Design (SUTD)

Bachelor of Engineering (B.E.), Computer Science (ISTD) - Artificial
Intelligence & Cyber Security · (2015 - 2018)

Victoria Junior College

Singapore-Cambridge General Certificate of Education 'A' Level · (2013 - 2014)

Victoria School (Singapore)

Singapore-Cambridge General Certificate of Education 'O'

Level · (2011 - 2012)