

# AMIT AGARWAL

## Product Lead, Tech Enthusiast & Adventure Seeker

@ amit.pinaki@gmail.com

📞 +1-510-862-4544/+91-8276815771

LinkedIn [linkedin.com/in/amitagarwal6](https://www.linkedin.com/in/amitagarwal6)

GitHub [github.com/amitbcp](https://github.com/amitbcp)

## EXPERIENCE

### Principal Applied Scientist - Generative AI/Computer Vision Oracle

📅 April 2021 - Ongoing     🗺 Seattle, US     🌐 [www.oracle.com](http://www.oracle.com)

Building Generative AI & Computer Vision products for OCI.

- Developed a Multi-Agent platform for RAG, NL2SQL, NL2Code, and ERP, deployed in 15+ enterprise engagements.
- Leading research on Multilingual & Multimodal LLMs; Responsible AI.
- Customizing foundation models for enterprise usecases & efficiency.
- Led product development and delivery of Document Understanding features while engaging with 20+ customers.
- Spearheaded research on pre-training Graph Neural Networks & smart training strategies for low-data use cases.
- Designed data-generation framework for Vision & NLP models. Enables multi-modal & multi-task learning.
- As first author: 21 pending patents; 4 issued patents
- Published Papers : ACL (3), EMNLP (4), NAACL (1), COLING (1), DASFAA (1), CIKM (1), ICDMAI (1)

### Data Scientist - Computer Vision

#### Jio Platforms (Reliance)

📅 June 2020 - April 2021     🗺 Hyderabad, India     🌐 [www.jio.com](http://www.jio.com)

Designed & Developed products for business verticals in Reliance.

#### Domain : Video & Sports Analytics

- Object Detection & Tracking for Indoor/Outdoor scenarios.
- Security & Compliance management from Security Footage.

#### Domain : Healthcare & Document Understanding

- Medical Image Analysis with Explainability for Reliance Hospitals.
- Visual Document Understanding & Information Retrieval with OCR.

### Senior Software Engineer - Data Science

#### Abzooba Infotech

📅 June 2016 - June 2020     🗺 Pune , India     🌐 [www.abzooba.com](http://www.abzooba.com)

#### Project: Cognitive Learning System for a Financial Group. [May 2017 - June 2020]

- Product Manager for Financial News Recommendation.
- Designed & Developed the following model/modules :
  - Disclosure Classification, Custom NER & WSD Models.
  - Image Disambiguation for finance charts & fund-managers.
  - Query Understanding, Expansion & Implicit User Feedback.
- Deep Learning based engine for Document Search & Summarizing.
- Managed Training Programs, Hackathons & Campus Recruitment.

#### Project : Xpresso Insights(Product). [Jun 2016 - Dec 2016]

- The engine provides actionable insights for customer feedback.
- Implemented data collection & analysis on customer behavior.

#### Project: SmartCity solution for Singapore Govt. [Aug 2016 - May 2017]

- Modelled trends among citizens to create an early warning system.
- Developed data ingestion & processing for predictive analysis.

## COMMUNITY

### Speaker

MIPR 2024; ICDMAI, 2020

### Data Science Mentor

Great Learning, MIT & UT Austin

### Program Committee/Area

#### Chair/Reviewer

AAAI, NeurIPS, CVPR, EMNLP, NAACL, IJCAI, Elsevier, ARR

### Open Source Contribution

VLMEvalKit, EasyOCR, PytorchLighting, Flair

## EDUCATION

### Masters in Machine Learning & AI

Liverpool John Moores University (LJMU) **(with Distinction)**

📅 2021 - 2022     🗺 Liverpool, UK

### PGD in Machine Learning & AI

International Institute of Information Technology (IIIT B)

📅 2020 - 2021     🗺 Bangalore, India

### Computer Science & Engineering

West Bengal University of Technology

📅 2012 - 2016     🗺 Kolkata, India

## PROFICIENCY

### Multi-Agent Frameworks



### Multimodal & Multilingual LLM



### Computer Vision & NLP



### Retrieval & Ranking Systems



## STRENGTHS

### Research-Driven

Experience in foundational AI research, leading advancements in multimodal & multilingual LLMs. Published in COLING, NAACL, & DASFAA; 17 patents filed.

### Learning Agility

Cross-functional experience in domains such as finance, automation, construction, and safety-security, adapting cutting-edge AI to enterprise use cases.

### Solution-Oriented

Proven ability to bridge research & real-world implementation, leading AI-powered products from ideation to customer deployment.

# SKILLS

## Languages & Relevant Training

- Large Language Models (LLMs), Diffusion Models, Multi-Modal Foundation Models
- Computer Vision, Natural Language Processing & Graph Neural Networks.
- Deep Learning, Machine Learning.
- Federated Learning, Sensor Fusion & GANs.

## Models

- **NLP** : BERT, RoBERTa, DistillBERT, Reward Models, other NLI & NLU Models
- **Computer Vision** : YOLO, LayoutLMs, CornerNet, CenterNet, UNET, Diffusion Models, CLIP, Object Detection & Tracking

## Tools & Softwares

- Tensorflow, PyTorch, Keras, PyTorch Lightning.
- Oracle Cloud, Azure Services & AWS.
- Docker, Git, Jira , Confluence, Maven.

# VOLUNTARY EXPERIENCE

## International Relations Manager

### AIESEC India & Thailand

 Sept 2014 – April 2015  Thailand  Sept 2014 – Dec 2014  India  aiesec.org

- Managed stakeholder relations and partnerships across 6 university entities.
- Improvised co-delivery experience model between India & Egypt.

## Executive Member

### AIESEC Kolkata

 Jan 2014 – Dec 2014  Kolkata,India  aiesec.org

- Responsible for program delivery in the student sector by striking relevant partnerships & leading expansions in 3 different cities.
- Managed a team of 25 members & organized events to cater CSR initiatives for partner organizations.

## Global Volunteer

### Bangkok University, AIESEC

 June 2013 – July 2013  Thailand  aiesec.org

- Cross-cultural project with interns from over 20 countries.
- Organized events & showcased Indian culture at various platforms.
- Conducted workshops in suburban schools to teach English.

# WORDS I LIVE BY

*"If your actions inspire others to dream more, learn more, do more & become more, you are a leader."*

- John Quincy Adams

# CERTIFICATIONS

## Generative AI with LLMs

### Deeplearning.ai & AWS

 2023  Bangalore,India

## GAN Specialization

### Deeplearning.ai & Coursera

 2021  Hyderabad,India

## AI for Medicine Specialization

### Deeplearning.ai & Coursera

 2020  Hyderabad,India

## Self-Driving Car Nanodegree

### Udacity [KPIT Technologies]

 2019  Pune,India

## Computer Vision Nanodegree

### Udacity [Nvidia DLI & Affectiva]

 2018  Pune,India

# MOST PROUD OF

## Edison Award, Oracle

Led cross-team AI research & product innovations.

## Academic Star, IIIT B

Awarded during post-graduation in Machine Learning & AI

## Top Performer, Abzooba

Top 5 contributors Award for 2016-17. Multiple Employee of the Month awards in 2018-19.

## Hackathons

**(Oracle, Abzooba & Open-Source)**  
Conducted & participated in Hackathons. Ranked within top 2%

## Outstanding Contributor

Awarded during Bachelor's for academic & cultural contributions.

## Certified Paraglider

Completed Pilot Training(P2) for Paragliding.

## Certified Scuba Diver

Completed Open Water & Advance diving certification.

# OTHER

## Guest Speaker

Invited as a guest speaker by Rotary Club,Belur.

## Event Organizer

Organized & conducted Quad-rotor Design Training in NIT,Manipur.