

# Arijit De

### TCS-RSP Research Scholar



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https://github.com/arijitde92



https://arijitde92.github.io/



Kolkata, India

### 😊 EDUCATION

**Master of Computer Science &** Aug, 2016 - Jul, 2018 Engineering, **GPA - 8.83** Jadavpur University, Kolkata

**Bachelor of Computer Science &** Aug 2010 - Jul 2014 Engineering, **GPA - 8.81** Techno India, Kolkata

### **SKILLS**

- Programming
  - **Python**
  - o C/C++
- **Machine Learning** 
  - PyTorch
  - TensorFlow
  - Scikit-Learn
  - MONAI
- **Medical Image Processing** 
  - SimpleITK
  - FreeSurfer (FSL)
- Latex
- Version Control
  - o Git
  - GitHub

### Summary

An aspiring research scientist looking to explore and contribute in solving real world computer vision problems. An ardent researcher with 4 years of experience in machine learning, data science and artificial intelligence. Also, a passionate techie, keen on application software development with experience in developing tools in python, PyQt and QT C++. I Love to collaborate with fellow researchers. Having a good track record of planning, designing and executing a task with excellent sense of time management.

# 🚔 Professional Experience

#### Mercedes Benz Research & Development India

#### **Data Quality Analyst**

Aug, 2018 to Sep, 2019

- Developed tools (in Qt C++) for manual quality control of annotated images needed for Vulnerable Road User (VRU)
- Created python scripts for automatic quality checks of labelled/annotated data which increased annotation throughput by 20%.
- Involved in data cleaning and dataset preprocessing for gesture recognition of VRU.

### **Tata Consultancy Services, India**

### **SAP CRM Consultant**

Aug, 2014 to Apr, 2015

- Provided support for client databases using SAP-CRM.
- · Responsibilities included generating daily reports, executing Change Requests on the database as needed from clients.

### **Publications**

- 1. A. De, M. Tiwari and A. S. Chowdhury, "3D Hippocampus Segmentation Using a Hog Based Loss Function with Majority Pooling," In ICIP 2023. Link to paper
- 2. A. De, R. Mhatre, M. Tiwari, A. S. Chowdhury, "Brain Tumor Classification from Radiology and Histopathology using Deep Features and Graph Convolutional Network". In ICPR 2022. Link to paper
- 3. A. De, M. Tiwari, E. Grisan and A. S. Chowdhury, "A Deep Graph Cut Model For 3D Brain Tumor Segmentation," In EMBC, 2022. Link to paper

### **CERTIFICATIONS**

- Deep Learning, a 5-course specialization, Deeplearning.ai Verify at coursera.org/verify/specialization/N3DEF 824QJXU
- TensorFlow in Practice Specialization, Deeplearning.ai Verify at – coursera.org/verify/specialization/58SUX N5LBX44
- MCPS: Microsoft Certified Professional, Microsoft Certification no.: E319-6162

### **Q** AWARDS

 Valuable contribution as reviewer in 7<sup>th</sup> International Conference on Computer Vision & Image Processing (CVIP)

2022

Guinness World Record
 participation certificate and
 breaking the record for most users
 taking an online computer
 programming lesson in 24 Hrs.

https://www.guvi.in/ai-for-india-detail

Awarded **TCS-RSP Fellowship** by Tata Consultancy Services (TCS)

2020

 Awarded National Doctoral Fellowship (NDF) by AICTE

2019

 Best Paper Award (3<sup>rd</sup> Position) in Computational Intelligence, Communications and Business Analytics conference (CICBA)  De A, Chowdhury AS. DTI based Alzheimer's disease classification with rank modulated fusion of CNNs and random forest. In Expert Systems with Applications (ESWA) 2021. Link to paper

 De, A., Das, N., Sarkar, R., Saha, P.K., Basu, S. "Design of Synthetic 3-D Pulmonary Phantoms Using 2-D Graphical User Interface". In CICBA 2018. <u>Link to paper</u>

### **□ Projects**

#### **Spiritual Chatbot**

### https://github.com/arijitde92/SpiritualChatBot

- A chatbot developed using OpenAI's GPT3.5 model.
- The AI chatbot has profound knowledge on the Hindu
   Vedic text "Bhagawad Gita" and acts as an avatar of
   Lord Vishnu who can offer spiritual guidance.
- The UI is developed using streamlit.

### **AD Classification App**

### https://github.com/arijitde92/AD\_Classification\_App

 A web application built with Python, Flask and MySQL where users can submit samples of their 3D MRI scan and get the diagnosis results.

### **Docuplus Website**

#### http://www.docuplus.ca

- A Responsive website for Canadian client Docuplus
- Built in PHP with MySQL. Hosted in GoDaddy Server.

## ₩ Teaching Experience

### **Edustation India, (Remote)**

### **Machine Learning Mentor**

Dec, 2022 to May, 2023

 Teaching theoretical & practical concepts of Machine Learning (ML) algorithms & data pre-processing techniques to build efficient ML applications.

#### **Upskillz, India (Remote)**

#### **Machine Learning Mentor**

May, 2022 to Nov, 2022

- Taught theoretical concepts on machine learning and data science along with hands-on practical sessions.
- Guided two ML projects to make students experience the end-to-end development and designing of ML models.

2018