

Arijit De

TCS-RSP Research Scholar

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Jadavpur University, Kolkata, India

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.



Skills:

- Programming - Python, Java, C++
- Machine Learning - PyTorch, TensorFlow, Scikit-Learn, Geometric, Tensorflow, Scikit-Learn, Medical Open Network for AI (MONAI)
- Medical Imaging - SimpleITK, Freesurfer (FSL)
- Data Science - Numpy, Pandas, Matplotlib, Seaborn
- Frontend - HTML, CSS, JavaScript, LaTeX
- Version Control - Git, GitHub



Education:

- **Master of Computer Science & Engineering,** Aug, 2016 - Jul, 2018
GPA - 8.83
Jadavpur University, Kolkata
- **Bachelor of Computer Science & Engineering,** Aug 2010 - Jul 2014
GPA - 8.81
Techno India, Kolkata



Certifications/Licenses:

- **Deep Learning, a 5-course specialization,** Deeplearning.ai (Apr, 2019)
- **MCPS: Microsoft Certified Professional,** Microsoft (Jun, 2013)
- **Programming in HTML5 with JavaScript and CSS3 Specialist,** Microsoft (Jun, 2013)



Professional Experience:

Mercedes Benz Research and Development India

Bengaluru, India

(Aug, 2018 to Sep, 2019)

Data Quality Analyst

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

Tata Consultancy Services,

Kolkata, India

(Aug 2014 - April 2015)

Assistant System Engineer

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



Teaching Experience:

Edustation, India (Remote)

(Dec, 2022 to present)

- Responsibilities included teaching theoretical & practical concepts of various Machine Learning (ML) algorithms & data pre-processing techniques to build efficient end to end ML applications.

Upskillz, India (Remote)

(May, 2022 to Oct, 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.

Teaching Assistant, Jadavpur University,

Kolkata

(Sep, 2019 to Present)

- Guided students in C Programming Practical (odd semester) and Data Structures and Algorithms with C (even semester).
- Took lectures on Engineering Mathematics as guest lecturer



Awards/Achievements:

- Awarded certificate for valuable contribution as reviewer in 7th International Conference on Computer Vision & Image Processing (CVIP) 2022
- Awarded Guinness World Record participation certificate for participating and breaking the record for most users taking an online computer programming lesson in 24 Hrs.
<https://www.guvi.in/ai-for-india-detail> 2021
- Awarded TCS-RSP Fellowship by Tata Consultancy Services (TCS) 2020
- Awarded National Doctoral Fellowship (NDF) by AICTE 2019
- Best Paper Award (3rd Position) in Computational Intelligence, Communications and Business Analytics conference (CICBA) 2018



Freelance Experience:

Developed a Responsive website for Canadian client Docuplus. Link – <http://www.docuplus.ca>

Built in PHP with MySQL. Hosted in GoDaddy Server.

Sep, 2015 – Jan, 2016

Languages:

English, Bengali, Hindi

Reference:

Dr. Ananda Shankar Chowdhury
Professor,
Department of Electronics and
Telecommunications Engineering,
Jadavpur University, Kolkata, India
Email:
as.chowdhury@jadavpuruniversity.in

Technical Laboratory Assistant, Techno India,

Kolkata

(Feb, 2016 to Jun, 2016)

- Responsibilities included designing coding assignments, checking and reviewing student code and also invigilation. Subjects involved were C, C++, Shell scripting and DBMS.



Publications:

- De A, Mhatre R, Tiwari M, Chowdhury AS. **Brain Tumor Classification from Radiology and Histopathology using Deep Features and Graph Convolutional Network**. In 2022 26th International Conference on Pattern Recognition (ICPR) 2022 Aug 21 (pp. 4420-4426). IEEE.
<https://ieeexplore.ieee.org/abstract/document/9956229>
- A. De, M. Tiwari, E. Grisan and A. S. Chowdhury, "A Deep Graph Cut Model For 3D Brain Tumor Segmentation," 2022 44th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC), 2022, pp. 2105-2109, doi: 10.1109/EMBC48229.2022.9871685.
<https://ieeexplore.ieee.org/document/9871685>
- De A, Chowdhury AS. **DTI based Alzheimer's disease classification with rank modulated fusion of CNNs and random forest**. Expert Systems with Applications. 2021 May 1;169:114338.
<https://www.sciencedirect.com/science/article/abs/pii/S0957417420310265>
- De, A., Das, N., Sarkar, R., Saha, P.K., Basu, S. (2019). **Design of Synthetic 3-D Pulmonary Phantoms Using 2-D Graphical User Interface**. In: Mandal, J., Mukhopadhyay, S., Dutta, P., Dasgupta, K. (eds) Computational Intelligence, Communications, and Business Analytics. CICBA 2018. Communications in Computer and Information Science, vol 1030. Springer, Singapore.
https://doi.org/10.1007/978-981-13-8578-0_17