TCG CREST, Tower I, Bengal Eco Intelligent Park
Block EM, Plot No. 3, Salt Lake, Kolkata 700091.
(+91) 8116925737
arindammajee5@gmail.com
https://arindammajee.github.io/
arindammajee arindammajee arimajee
Date of Birth - June 7, 2002

ARINDAM MAJEE

Education

2019 – 2023 : **Bachelor of Engineering (Hons), Electronics and Telecommunication Engineering**, *Jadavpur University*, Kolkata.
CGPA: 9.0/10 (Percentage: 86.12%)

2017 – 2019 : **Higher Secondary Examination**, *Talajuri Srimati High School*, West Bengal Council of Higher Secondary Education, Subjects – Mathematics, Physics, Chemistry, Biology, English, Bengali.
Percentage: 92.6%

Publications

Visit my *Google Scholar* profile for an updated list of my publications- https://scholar.google.com/citations?hl=en&user=sqGrHcoAAAAJ

* denotes equal contribution, first author's name is in bold format and my name is underlined.

Journal Articles

2022 ***Somnath Chatterjee***, **Shreya Biswas, *Arindam Majee, Shibaprasad Sen, Diego Oliva, Ram Sarkar*, Breast cancer detection from thermal images using a Grunwald-Letnikov-aided Dragonfly algorithm-based deep feature selection method, Computers in biology and medicine, Volume 141, pages 105027, Elsevier, 2021, https://doi.org/10.1016/j.compbiomed.2021.105027.

2021 ****Shreya Biswas***, *Somnath Chatterjee, *Arindam Majee, Shibaprasad Sen, Friedhelm Schwenker, Ram Sarkar*, Prediction of COVID-19 from Chest CT Images Using an Ensemble of Deep Learning Models, Appl. Sci. 2021, 11, 7004. https://doi.org/10.3390/app11157004.

Book Chapter

2022 ***Arindam Majee***, *Shreya Biswas, Somnath Chatterjee, Shibaprasad Sen, Seyedali Mirjalili and Ram Sarkar*, Moth-Flame Optimization-Based Deep Feature Selection for Cardiovascular Disease Detection Using ECG Signal, Handbook of Moth-Flame Optimization Algorithm, CRC press, pages 129-151, (doi: https://doi.org/10.1201/9781003205326-10).

Technical Report

2022 ***A. Majee,***, *R. Saha, S. Roy, S. Roy Chaudhury, S. Mandal, S. Chatterjee*, Swarm UAVs Communication, https://shorturl.at/pzAQR.

Experience

Jun 2023 – present **Project Assistant**, *Institute of Advancing Intelligence (IAI), The Chatterjee Group Centre for Research & Education in Science & Technology (TCG CREST)*.

- Building a GPU cluster with 6 GPUs to make a HPC system via Kubernetes.
- Building an AI-based system which uses historical stock prices, tweets, news to forecast the stock market. The stock market sentiment analyzer use Graph Neural Networks to find relation between any two different company' stock.
- Built an AI-based neuro-degenerative disease (Alzheimer) detector from Brain Connectome graphs and 3D MRI scans.

Jul 2022 – Jun 2023 **Final Year Research Assistant**, *AI Lab*, ETCE Department, Jadavpur University, Kolkata.
- Worked as a final-year research assistant as a part of the course curriculum under the supervision of Prof. Amit Konar & Dr. Pratyusha Rakshit.
- Built a reinforcement learning-based object-tracking system.

Jun 2022 – Aug 2022 **MITACS Globalink Research Intern**, *Ryerson University, Toronto*.
- Worked as a remote intern under the supervision of Prof. Farrokh Janabi Sharifi of the Mechanical Department, Ryerson University.
- Performed literature survey which led to the development of a new UAM model using Solidworks.

May 2020 – Sept 2021 **UG Research Assistant**, *CSE Department, Jadavpur University*.
- Worked as a UG research assistant under the supervision of Prof. Ram Sarkar.
- My work was focused on Deep Learning, Medical Image Classification & Segmentation, and Bio-inspired algorithms.
- Published 2 international journal papers including one in Elsevier and one book chapter.

Skills

Programming	C, C++, Python, C, C++, MATLAB, JavaScript, Java
HDLs	Verilog, Embedded C
Design Tools	Simulink, CircuitMaker, Multisim, LTSpice, Tanner EDA, Mentor Graphics, Xilinx, Solidworks
Frameworks & Libraries	TensorFlow, Keras, Numpy, Pandas, OpenCV, SciPy, Matplotlib, Sci-Kit Learn, Pillow, Seaborn, Pytorch
Web	HTML5, CSS3, PHP, Flask
Database	MySQL, SQLite, MongoDB
Platform	Linux, Windows, Arduino
Cloud	AWS
Soft Skills	Leadership, Event Management, Writing, Public Speaking, Time Management

Projects

January 23 - present **Linear Prediction of Video Sequences and object tracking**, This is my final year B.E. project which I am doing with my batchmate Shreya Biswas under the guidance of Prof. Pratyusha Rakshit of my department. Here we are developing a deep multi-modal architecture for accurately predicting the next sequence of a video.

March 2020 **Autonomous Ground Robot with Obstacle avoidance**, Here we developed a 2-wheeler autonomous bot, which senses black paths using an infrared sensor. And then moves along the searched black path and controls its movement using PID controlling technique. Here are some exciting photos of our bot. Visit here - https://sites.google.com/view/arindam-majee/projects.

Fellowships & Awards

Jun 2023 **Awarded First Prize** in the **Moore Memorial Poster Competition-2023** organized by the IEEE Solid-State Circuits Society, Kolkata section.

2019 – 2023 ***JBNSTS Senior Fellowship,*** Jagadish Chandra Bose National Science Talent Search (JBNSTS) senior fellowship is a prestigious scholarship scheme initiated by the Government of West Bengal to encourage young students to pursue STEM as a career after class 12th.

2022 Awarded the ***MITACS Globalink Research Fellowship*** for a fully funded research internship at Ryerson University, Toronto.

2017 –2019 ***JBNSTS Junior Fellowship,*** Jagadish Chandra Bose National Science Talent Search (JBNSTS) junior fellowship is a prestigious scholarship scheme initiated by the Government of West Bengal to encourage young students to pursue science as a career after class 10th.

Certificates

Nov 2020 **Algorithmic Toolbox**, *UC San Diego*, Coursera, View the certificate here-. https://www.coursera.org/account/accomplishments/certificate/TQ6ENR8QA348

Nov 2020 **Deep Learning Specialization**, *DeepLearning.AI*, Coursera, View the certificate here-. https://www.coursera.org/account/accomplishments/specialization/certificate/HKZENCZJV2DD

Nov 2020 **Image and Video Processing: From Mars to Hollywood with a Stop at the Hospital**, *Duke University*, Coursera, View the certificate here-. https://www.coursera.org/account/accomplishments/certificate/JJQA987NNRQY

Oct 2020 **Natural Language Processing with Classification and Vector Spaces**, *DeepLearning.AI*, Coursera, View the certificate here-. https://www.coursera.org/account/accomplishments/certificate/K7LA2Y399TUN

August 2020 **Introduction to MATLAB**, *Vanderbilt University*, Coursera, View the certificate here-. https://www.coursera.org/account/accomplishments/certificate/NJ5WTPVLQUSC

May 2021 **Introduction to Quantum Computing Course**, *The Coding School*, sponsored by IBM, View the certificate here - https://drive.google.com/file/d/1JFYQvpZs6hWucHi07-WdD5xpjwBB7ymu/view.

Workshops/Technical Events Attended/Organized

December 15-17, 2022 **IndoML 22**, *Attended Indian Symposium on Machine Learning (IndoML 22)*, held at IIT Gandinagar.

April 14-16, 2022 **Srijan 22**, *Organised the annual Techno-managemental fest,* ***Srijan*** *of Jadavpur University*, at Salt Lake campus, Jadavpur University.

Position of Responsibility & Extracurricular Activity

2019 – 2023 **Class Representative (CR) of ETCE 2019–2023 batch**, Jadavpur University.

2020 – 2023 **Executive member of Jadavpur University Science Club (JUSC)**, Jadavpur University.

2020 – 2022 **Executive member of IEEE Student Branch**, Jadavpur University.