Subrat Prasad Panda

NTU, Singapore

+65-85** **** | subratprasad.mail@gmail.com | https://subratpp.github.io/

Education

Nanyang Technological University — Singapore
PhD in Computer Science and Engineering — *Jan. 2023 – ***

Indian Statistical Institute — Kolkata, India
Master of Technology in Computer Science, CPI: 82.1% — *Jul. 2019 – Jul. 2021*

National Institute of Technology — Silchar, India
Bachelor of Technology in Electronics and Instrumentation Engineering, CPI: 7.92/10 — *Aug. 2012 – May 2016*

Jawahar Navodaya Vidyalaya — Cuttack, India
CBSE 10^{th} *CPI:* 9.6/10 *and CBSE* 12^{th} *CPI:* 88.6% — *Aug. 2006 – Mar 2012*

Experience

Research Associate — May 2022 – Dec 2022
CNRS@CREATE — *Create Way, Singapore*
- Designing a granular control system for micro-grids using DRL

Machine Learning Engineer — Dec 2021 – May 2022
InFocusp Innovation Pvt. Ltd. — *Pune, India*
- Solving Abstraction and Reasoning Challenge (ARC) with Reinforcement Learning

Research Engineer — Aug 2021 – Oct 2021
Technology Innovation Hub on Autonomous Navigation (TiHAN), IIT Hyderabad — *Hyderabad, India*
- Development of braking and throttle control using Arduino for a test vehicle
- Deployment of lane detection model on NVIDIA AGX board

Aviation Officer — Jul 2016 – Oct 2018
Hindustan Petroleum Corporation Limited (HPCL), Chandigarh International Airport — *Chandigarh, India*
- Maintenance, Repair and Management of Equipment for Aircraft Refueling

Summer Intern — May 2015 – Jul 2015
Defence Research and Development Organization (DRDO) — *New Delhi, India*
- Worked on an Image Processing Project at Defence Terrain Research Laboratory (DTRL) of DRDO

Publications

1. **Panda S.P.**, Ray K, Banerjee A. Service Allocation / Placement in Multi-Access Edge Computing with Workload Fluctuations. In proceedings of the 19th International Conference on Service Oriented Computing **(ICSOC)** 2021, Dubai.

2. **Panda S.P.**, Banerjee A. and Bhattacharya A., User Allocation in Mobile Edge Computing: A Deep Reinforcement Learning Approach. In proceedings of the 28th IEEE International Conference on Web Services **(ICWS)** 2021.

3. **Panda S.P.**, Ray K. and Banerjee A., Dynamic Edge User Allocation with User Specified QoS Preferences. In proceedings of the 18th International Conference on Service Oriented Computing **(ICSOC)** 2020, Dubai, pages 187-197.

4. **Panda S.P.**, Image contrast enhancement in spatial domain using fuzzy logic based interpolation method, 2016 IEEE Students' Conference on Electrical, Electronics and Computer Science (SCEECS), 2016, pp. 1-4, doi: 10.1109/SCEECS.2016.7509315.

Projects

1. **M.Tech Thesis (2021)**: "Strategies for User Allocation and Service Placement in Multi-Access Edge Computing" under the supervision of Prof. Ansuman Banerjee.
2. Image classification using Tensorflow on the MNIST fashion and handwritten image dataset.
3. Image smoothing, filtering and analysis in frequency domain using DFT.
4. Implementation of Linear Regression, SVM and CNN from scratch, Oct 2020
5. **B.Tech Thesis (2016)**: "Real-Time Position Control of DC Motor using PID and Fuzzy Logic" under the supervision of Dr. Munmun Khanra.
6. Colored Image Contrast Enhancement in Spatial Domain using Histogram Equalization and Cubic Spline Interpolation, Developed in C++, May 2015 – July 2015(DRDO Summer Intern)
7. Gesture Controlled Mouse Pointer using LabVIEW, April 2015 (Mini Project)

Achievements

General Electric Edition Challenge | *Top 25 Finalist* 2016
- Internet of Things based Engine Exhaust Gas Monitoring System

Texas Instruments Innovation Challenge 2015 | 1^{st} *Round* 2015
- Non-Invasive Digital Blood Pressure Meter

Research Interests

1. Deep Learning 2. Deep Reinforcement Learning 3. Explainable RL 4. Computer Vision

Technical Skills

Languages: Python, C, Matlab, Latex
Frameworks: Pytorch, Tensorflow, ROS

Relevant Coursework

1. Neural Networks 2. Data-Mining 3. Pattern Recognition and Image Processing 4. Computer Vision

References

Dr Ansuman Banerjee, Professor, Advanced Computing and Microelectronics Unit, Indian Statistical Institute, Kolkata (India), email: ansuman@isical.ac.in

Dr Arani Bhattacharya, Assistant Professor (CSE), Indraprastha Institute of Information Technology, New Delhi (India), email: arani@iiitd.ac.in

Dr Munmun Khanra, Assistant Professor, Dept. of Electronics and Instrumentation, National Institute of Technology, Silchar(India), email: munmun@ei.nits.ac.in