PURVI DAS

Indian Institute of Information Technology, Guwahati
Assam, India
purvidas | linkedin.com/in/purvi-das | github.com/purvidas | +91 8638823659 | purvikuhi.github.io

Education

Indian Institute of Information Technology, Guwahati **2019-Present**
Bachelor of Technology, Electronics and Communication Engineering, CGPA(ongoing): 8.04 *India*

Experience

TCS Research **Dec 2022 - Present**
Researcher *Mumbai, India*

Indian Institute of Information Technology, Guwahati **Dec 2021 - Nov 2022**
Undergraduate Researcher, Department of Electronics and Communication Engineering *Guwahati, India*

- Created a framework to tackle transistor sizing using optimization based technique.
- Optimized satellite trajectory method for efficient space debris removal.

Amazon ML Summer School **Jul 2022**
Fellow — Certificate

- Was part of summer school program involving unique modules covering eight topics including Supervised Learning, Deep Neural Networks, Dimensionality Reduction, Unsupervised Learning, Probabilistic Graphical Models, Sequential Learning Causal Inference and Reinforcement Learning.

International Institute of Information Technology, Hyderabad **May 2022 - Jun 2022**
Research Intern — Certificate *Hyderabad, India*

- Assessed quantum processes for information processing tasks.

Indian Oil Corporation Limited **Dec 2021 - Jan 2022**
Intern — Certificate *Guwahati, India*

- Studied network topology used in an industry environment.
- Worked to improve wireless sensor network trying to reduce the scattering caused by the metallic environment.

Defence Research and Development Organisation **May 2021 - Jul 2021**
Research Intern, Advanced Systems Laboratory (ASL) — Certificate *Hyderabad, India*

- Developed a program to investigate the properties of the RADAR signals.
- Worked in developing a Deep Neural Network for classification of RADAR waveforms in MATLAB environment.

Research Articles

Conference Paper

- P. Das and B. Jajodia, "Design Automation of Two-Stage Operational Amplifier Using Multi-Objective Genetic Algorithm and SPICE Framework," in 2022 IEEE 5th International Conference on Inventive Computation Technologies (ICICT), Lalitpur, Nepal, 20-22 July, 2022

Research Poster

- P. Das and B. Jajodia, "Design Optimization of Analog Circuit using Multi-Objective Genetic Algorithm and SPICE Framework" in North-East Research Conclave, Indian Institute of Technology Guwahati, 20-22 May, 2022 (Technical Presentation on Extended Abstract)

Projects

Satellite Trajectory Optimization for Multiple Active Space Debris Removal

- Examined a trajectory optimization methodology and its applicability to multiple active debris removal based on an approach to the optimization technique.

Positions of Responsibility

Editor | *E-Cell IIITG — Certificate* **Oct 2019 - Aug 2022**

- Conducted several talks and workshop promoting the entrepreneurship culture in the institute.
- Curated several articles and worked as an editor for the inaugural edition for yearbook of E-Cell IIITG.

Social Media Marketing Lead | *DSC IIITG* — Certificate **Aug 2021 - Aug 2022**

- Conducted talk sessions and google funded workshops to develop a technical culture.
- Created marketing strategy to promote the events through social media.

Editorial Board | *TEDxIIITG* **Jan 2021 - Apr 2021**

- Organised the first ever TEDx of IIITG and served as an editor for the same.
- Handled the social media marketing of the event.

Technical Skills

Proficient: MATLAB, Verilog, Python
Comfortable: C, C++, HTML/CSS, JavaScript, LATEX
OS: Ubuntu, Windows, macOS
Tools: Git, GitHub, Cadence, HSPICE, Vivado, VS Code, Eclipse, Jupyter Notebook, MATLAB
Languages: English, Hindi, Assamese, Sanskrit

Coursework

Computer Science: Programming Languages, Data Communication, Digital Hardware Design, Computer Architecture, Discrete Mathematical Structures, Data Structures, Artificial Intelligence, Machine Learning, Deep learning.
Mathematics: Discrete Mathematics, Numerical Optimization, Statistical Methods and Algorithms, Probability Theory, Stochastic Process, Real Analysis, Differential Equations, Linear Algebra, Multivariable Calculus.
Electronics: Digital and Analog Communication, Mixed-Signals Architecture, Digital Electronics Design, VLSI Design, SemiConductor Devices, Micro-Electronic Circuits, Embedded Systems, Digital Signal Processing.

Leadership / Extracurricular

Rashtrapati Guide **Batch 2016-17**
President of India's Awardee *Bharat Scouts and Guides*

Bachelor of Music(BMus) in Kathak **Batch 2016-17**
Bhatkhande Music Institute, Lucknow

Member of Institution Innovation Cell, IIITG **2019-Present**
Ministry of Education, Government of India

References

Assistant Prof. Babita Jajodia
Department of Electronics and Communication Engineering, IIIT Guwahati, babita@iiitg.ac.in

Teza Bhaimidi
Scientist, DRDO, bs.teza.asl@gov.in