

Aujasvit Datta

Website: aujasvit.com | Email: aujasvitd22@iitk.ac.in

LinkedIn: [/aujasvit](#)

Codeforces: [aujasvit](#)

Github: [@aujasvit](#)

EDUCATION

Indian Institute of Technology Kanpur

Bachelor of Technology, Electrical Engineering and Computer Science (Double Major)

Set to complete 10-semester curriculum in 9 semesters

November 2022 - December 2026

GPA: 9.3/10.0

Activities: Editor, Vox Populi (Campus Journalism) | Member, Team Vision (Autonomous Ground Navigation)

ACADEMIC ACHIEVEMENTS

- Awarded **Bronze Medal** in the **Indian National Olympiad in Informatics 2022** conducted by the **IARCS**
- Achieved **Silver Division** in the **United States of America Computing Olympiad (USACO)**
- Secured **All India Rank 955** in **Joint Entrance Examination-Advanced 2022** among the 155,538 shortlisted candidates
- Secured **All India Rank 1639** and **99.82 percentile** in **Joint Entrance Examination-Main 2022** among 1 million candidates
- Awarded **KVPY SA Scholarship 2020** by the **Department of Science and Technology, Government of India**

PUBLICATIONS

Resolution-Agnostic Neural Operators for Multi-Rate Sparse-View CT

[arXiv](#) | [PDF](#) | [Code](#)

Aujasvit Datta*, Jiayun Wang*, Asad Aali, Anima Anandkumar

European Conference on Computer Vision (ECCV), 2026

* equal contribution

RESEARCH EXPERIENCE

California Institute of Technology

Research Intern, Anima AI for Science Lab

May 2025 - Present

- Developed resolution-agnostic neural operator-based learning methods for accelerated Computed Tomography (CT) scans
- Currently working on applying neural operators to image diffusion models
- Advised by [Prof. Anima Anandkumar](#), Caltech and [Prof. Peter Wang](#), Georgia Tech

Technische Universität Darmstadt

Research Intern, Medical and Environment Computing Lab

[Github](#)
May 2024 - August 2024

- Developed a mahalanobis-distance based client reliability measure to detect malfunctioning and malicious client updates
- Implemented federated learning algorithms for distributed training across multiple clients while preserving data privacy

INDUSTRY EXPERIENCE

Databricks

Software Development Engineer Intern

May 2026 - July 2026

- Built and productionized a Global Alertmanager which allowed grouping a multi-region outage into a single PagerDuty incident
- Onboarded 5% of production alerting load across six services, cutting page volume up to $\sim 80\times$ for them during alert storms
- Owned the design end to end, from cross-region alert routing and grouping to the customer-facing alerting UI integration

Center for Developing Intelligent Systems, IIT Kanpur

Software Engineering Intern

[Github](#)
October 2023 - August 2024

- Designed and developed a decentralized online local marketplace platform on top of the Nostr Networking Protocol
- Implemented frontend system by developing customer and merchant mobile applications using Flutter and Riverpod
- Extended Nostream relay implementation using TypeScript to add inter-relay communication functionality at the backend
- Tools used: Flutter, TypeScript, Dart, SQLite

PROJECTS

Decoding-based Regression

Course Project, Probabilistic Machine Learning

[Github](#)

- Implemented transformer-based sequence regression with novel p-adic and Stern–Brocot tokenizations for real-valued targets
- Ran large-scale experiments showing effectiveness of non-standard numerical representations in decoding-based regression
- Achieved improved log-likelihood scores on UCI regression datasets and better density estimates for synthetic distributions

GPUDirect TCP: NIC-to-GPU DMA for a GPU-Resident TCP/IP Stack

Course Project, Linux Kernel Programming

[Github](#)

- Modified the Linux e1000e NIC driver to DMA incoming packets directly into GPU VRAM using GPUDirect RDMA
- Built a GPU-resident TCP/IP stack in CUDA, parsing 32 packets per warp and returning non-GPU traffic to Linux
- Showed full TCP offload to a commodity GPU sustains 949 Mbps line rate with kernel softirq CPU load held at 0%
- Tools used: C, CUDA, Linux Kernel

TECHNICAL SKILLS

• **Languages/Frameworks:** C | C++ | Python | Verilog | Flutter **Libraries:** NumPy | Pandas | Matplotlib | Scikit-learn | PyTorch