Joyjit Choudhury

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EDUCATION

University of Victoria

Victoria, BC

Master of Science (Thesis) in Computer Science, GPA: 9/9

Sept 2024 - Dec 2025

- Research Area: VLS Databases, Distributed LLM Agent Orchestration
- Coursework: Data Mining & Machine Learning, Data Models & Algorithms

Concordia University

Montreal, QC

Master of Applied Computer Science (Transferred to UVic)

Jan 2024 - Aug 2024

• Coursework: Algorithm Design, Deep Learning, Advanced Programming

National Institute of Technology Durgapur

Durgapur, India

B. Tech. in Computer Science & Engineering, GPA: 8.74/10 (Graduated with First Class Distinction)

2014 - 2018

• Coursework: Discrete Mathematics, Computer Architecture, Data Structures & Algorithms, Compiler Design, Operating Systems, Database Management, Computer Networks, Artificial Intelligence

EXPERIENCE

University of Victoria

Victoria, BC

Graduate Teaching Assistant | CSC 429/529 - Crpytography

Jan 2025 - Apr 2025

· Assist academic instruction by grading problem sets/exams for the CS senior/graduate level course on cryptography

Turvo (acquired by Lineage, Inc.)

Hyderabad, India

Senior Software Engineer (SDE 3) | Distributed Systems, Java, Python, ElasticSearch, RabbitMQ, Redis

Aug 2019 - Dec 2023

- Engineered cost-efficient integrations by implementing OpenRouteService and Nominatim APIs, saving upwards of US\$750K annually on map API expenses
- Live debugging and resolution of multiple production p0 incidents by using logs of systems distributed across multiple servers, message queues and databases with the leadership team and clients present on-call.
- Spearheaded a critical feature for Turvo TMS—Order-Shipment Synchronization—delivering it from scratch under tight deadlines while leading a team of senior engineers.
- Modernized the internal map library across the platform to support newer HERE Maps APIs with dynamic version control, enhancing system flexibility.
- Designed and developed critical platform components—accounts, billing, shipments, and a high-performance Redis-based lookup cache library—while serving as a SME for Inventory, Exceptions, and Notifications to resolve complex issues.
- Conducted interviews for over 50 candidates and mentored 5+ new hires, providing technical guidance and ensuring successful integration into the team.

Oracle Hyderabad, India

Applications Engineer | Java, REST APIs, JAX-RS, EJB, JPA, SQL, JavaScript, Oracle JET, HTML/CSS

Jul 2018 - Aug 2019

• As one of the first three engineers on Mercury, an in-house supply chain planning tool, I led full-stack development of its Budget Control Module for efficient budget management.

Complex Networks Research Group, IIT Kharagpur

Kharagpur, India

Research Intern | Multivariate point processes, C++, GCC

Summer 2017

• Developed a custom C++ package for Fitting Parameters of a Sparse Multidimensional Hawkes Process, for modeling Online Social Networks with minimum error.

PROJECTS AND OPEN SOURCE

GNOME Calendar | Open Source Contribution | C, GTK+

Summer 2017

- Authored and merged multiple patches fixing some obscure bugs in the week-view functionality of GNOME Calendar
- GNOME Calendar is the calendar application for the Linux GNOME Desktop Environment. Written primarily in C, it uses GTK+ for creating the GUI.

TECHNICAL SKILLS

Languages & Tools: Java, C/C++, Python, JavaScript, SQL, HTML/CSS, git, Docker, AWS, LATEX, Linux

Frameworks & Libraries: Spring, Spring Boot, PyTorch, Pandas, NumPy, RabbitMQ, Kibana

Database Tech: MySQL, MongoDB, ElasticSearch, Redis, Neo4j, Pinecone

Architectures: REST APIs, Microservices, Event-driven Systems, Database Sharding, Distributed Systems debugging

Testing & Other Tools: Jenkins, Liquibase, Log4j, Unit Testing, Performance Testing

ACHIEVEMENTS

- Most Valuable Player, Awarded MVP for R3/R4 2022 performance at Turvo Inc.
- Rank ~16k in JEE MAIN, 2014 (AIEEE), Top 1% among 1.35 million students
- Rank ~14k in JEE ADVANCE, 2014 (IIT-JEE), Among the Top 150k students from JEE(MAIN), 2014
- Rank 1 in Senior Secondary School, Army Public School Kolkata (Science stream)