

EDUCATION

International Institute of Information Technology, Hyderabad

Aug '15 - July '19

B.Tech. (Honours) in Computer Science & Engineering

Cumulative GPA: 8.61/10

EXPERIENCE

Senior Software Developer | Bloomberg – New York

July '22 - Present

- *Technologies:* C++, Python, Library-Development, Metaprogramming, Apache Arrow, DuckDB, Rust
- Led the development of a Python Data Provider SDK leveraging C++ and Apache Arrow
 - + Enabled rapid onboarding of datasets with analytics powered by in-house C++ library
 - + Innovatively developed using Python decorators for low maintenance and great DevX.
 - + Bindings work with modern Python features - asyncio, dataclasses and typing
- Co-developed an inhouse high-performance C++ embedded analytics engine
 - + Utilized modern C++ metaprogramming to streamline kernel development.
 - + Designed as a flexible and performant library adaptable to time-series, geospatial, and other use cases.
- Developed a DuckDB extension for Cassandra
- Leading discussions to standardize observability recording for analytical applications
 - + Developed tooling for this to diagnose data and performance issues
- Innersource contributions:
 - + Added support for TIME.INTERVAL data-type in the Rust driver for in-house database Comdb2
 - + Wrote a Doxygen preprocessor generating around 50% of the docs within Bloomberg

Software Developer | Bloomberg – London

Aug '19 - July '22

- *Technologies:* C++, Python, Distributed Systems, LLVM
- Worked on the TickerPlant infrastructure which collects and processes time-sensitive market events
- Developed tooling to diagnose latency issues in the queues and responsible for on-call support of the same
- Helped migrate upstream teams to a new data format with custom LLVM tooling
- Migrated Python bindings for the C++ codebase to new infrastructure while preserving the API

PREVIOUS EXPERIENCE

Product Intern | Adobe Systems – Noida [*Distributed Systems, NodeJS*] | *May '18 - July '18*

- Built a real-time collaborative editor for graphical documents with offline support.
- Integrated with the open-source vector graphics app SVG-Edit.

Google Summer of Code – GNOME [*C, GLib, GTK, Linux Kernel APIs*] | *Apr '16 - Aug '16*

- Worked on GNOME Games - an emulator app, to add gamepad/game controller support
- Developed a library for abstracting the Linux Input API and integrated it with GNOME Games

Systems Administrator | IIIT Hyderabad [*Docker, Networks, Auth*] | *Aug '18 - July '19*

- Maintained & deployed institute-wide infrastructure and services (LDAP, Squid, Email, lists, NS, etc)
- Migrated a monolith PHP app to a service-based architecture with dockerized deployment

Undergraduate Researcher | CVIT – IIIT Hyd [*Deep Learning, PyTorch*] | *July '17 - July '19*

- Worked with Prof CV Jawahar on Document Semantic Structure Extraction to aid blind students
- Worked on face recognition and automated analysis of news videos & bias detection

SKILLS & RELEVANT COURSES

- **Skills:** C++, Rust, Python, Systems Programming, Data-Oriented Design
- **Secondary Skills:** Mentoring, Leading Projects, Tooling Development
- **Core Courses:** Data Structures, Algorithms, Computer Networks, Information Security
- **Advanced Courses:** Distributed Systems, Operating Systems, Database Systems, Compilers