

## EDUCATION

---

**International Institute of Information Technology, Hyderabad**  
B.Tech. (Honours) in Computer Science & Engineering

*Aug '15 - July '19*  
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