

Tech enthusiast and systems-oriented generalist with a passion for low-level abstractions, distributed computing, inter-process communication, and Information Security. Experienced in DevOps, backend systems, and GNU/Linux systems. I enjoy exploring how abstraction layers interact, from syscalls to APIs.

## Work Experiences

- Application Operations Enginee II - Therap BD Ltd. August 2022 - Now  
Therap - US-based SaaS provider for disability services organizations, including US government clients.
  - Deploy, maintain, and troubleshoot JVM-based applications—including a 500MB+ monolith on **WebLogic** and Oracle DB — across Oracle Linux and cloud environments.
  - Build and manage **observability pipelines** with Vector (log transformation) and Falcon LogScale (real-time queries) for visibility into system behavior.
  - Investigate **performance bottlenecks** and system anomalies across networked Java modules using **Wireshark**, system logs, JFR-JMC and deep-dive debugging: discovered a Hazelcast cluster **split-brain** issue related to network segmentation that caused multiple cluster leaders in production.
- Backend Engineer - TicketBD (early-stage startup) February 2016 - 2017
  - TicketBD, lauched in Sayedabad, Dhaka to sell bus tickets. **Designed** and **implemented** this PHP backend application, handled multiple buy requests to the same "bus seat" using caching. Worked here when I was in college.

## Technical Skills and Projects

- Algorithmic Problem Solving (400+ and counting), InfoSec Security Contests ([dovi-0x06 @THM](#)), C++, Python, GNU/Linux systems (7+ years), Web Frameworks / MVC architecture, Git, OSI Layers. I notice and enjoy other's design choices (UI/UX, System Architecture, Typography etc)
- Projects: Pprojects to understand various abstraction layers of Operating Systems such as:
  - **Linux Virtual File System:** [Sec\\_Fs](#), that encrypts file contents in every write request
  - **Github Clone:** [Gitbucket](#) - that lets us clone over http
  - Local Network File Servers, Android OS Daemons, **Linux CLI** tools etc
- Writing: I write and investigate about **Systems**, **System Architecture**, **GNU/Linux**, **Software Daemons**, **File Systems** (undergrad thesis on file systems on user space), **Syscalls** (strace!), Infosec, **Computer Networks and the Internet** on my free time

## Education

- Dhaka University of Engineering & Technology, Gazipur February 2018 - Aug 2022
  - BSc, Computer Science and Engineering

## Leadership and Experiences (selected)

- Culinary Advisory Committee Member - Therap BD Ltd. Feb 2025 - Current
  - Selected breakfast and lunch menu for 450+ individuals in home-grown kitchen, kept dietary preferences, allergies, and cultural considerations while designing menus, visited the kitchen for inspections, communicated with the chefs for healthier recipes
- Vice President, Ex General Secretary - DUET Computer Society July 2021 - June 2022
- Senior Vice President - DUET Sports Club July 2021 - Jan 2022
- Twenty years of farming experience (from childhood to end of college), One year of living experience in a jungle (Bhawal National Park, Gazipur for CCA Turtle Conservation Centre)

## Field of Interests

- Computer Systems, Core CS, Cooking, Agriculture (grew up in a farming household), World Peace, Mass/Public Education, [Visual Communication](#), Animal Conservation (Volunteered for a year at [Creative Conservation Alliance](#), [Turtle Conservation Center](#), [Bhawal National Park](#) in 2021 lockdown), Sports and Poetry, Chess, Math, Online forums (Hacker News, Reddit), Local and Global Economy and anything that stirs the intellectual interest