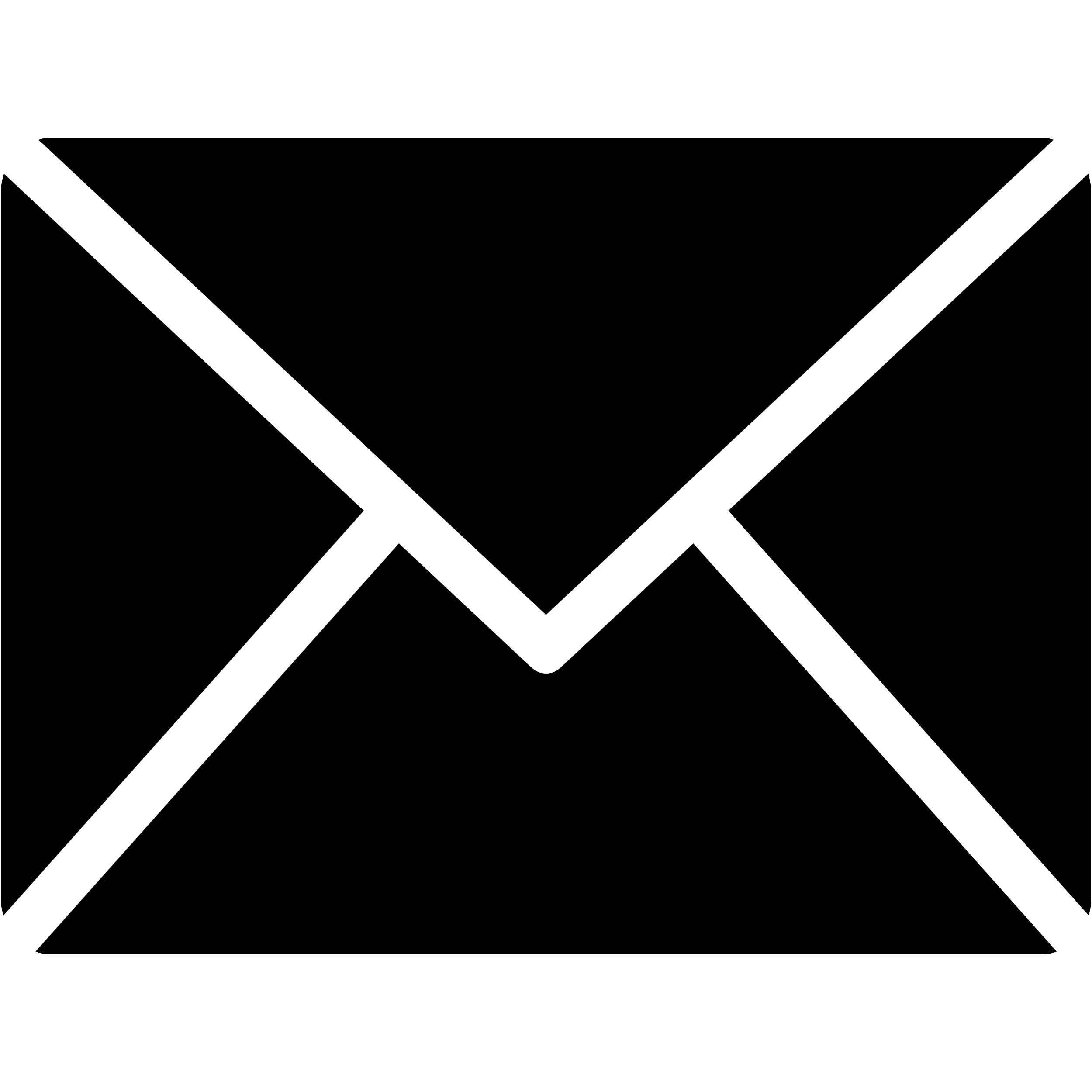
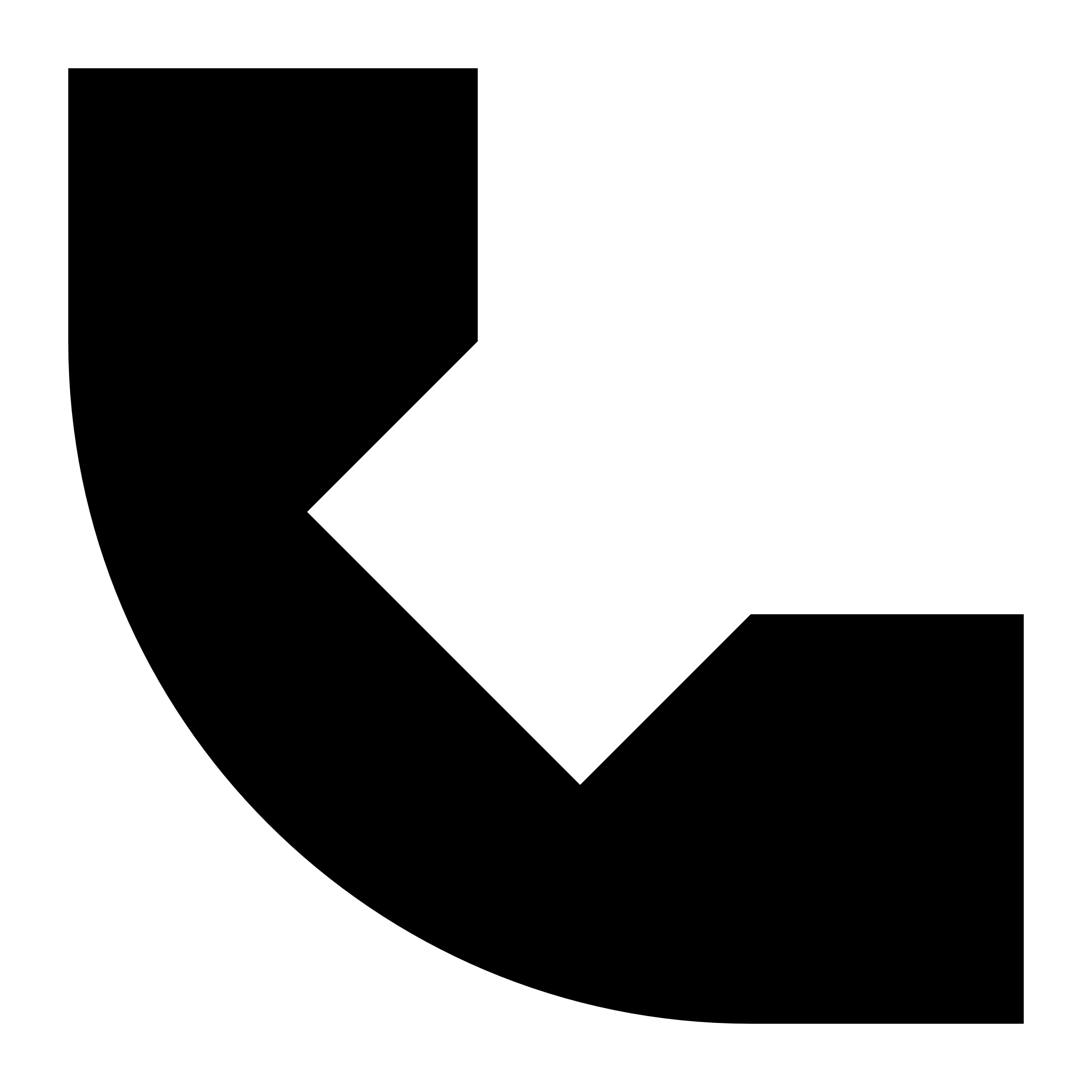
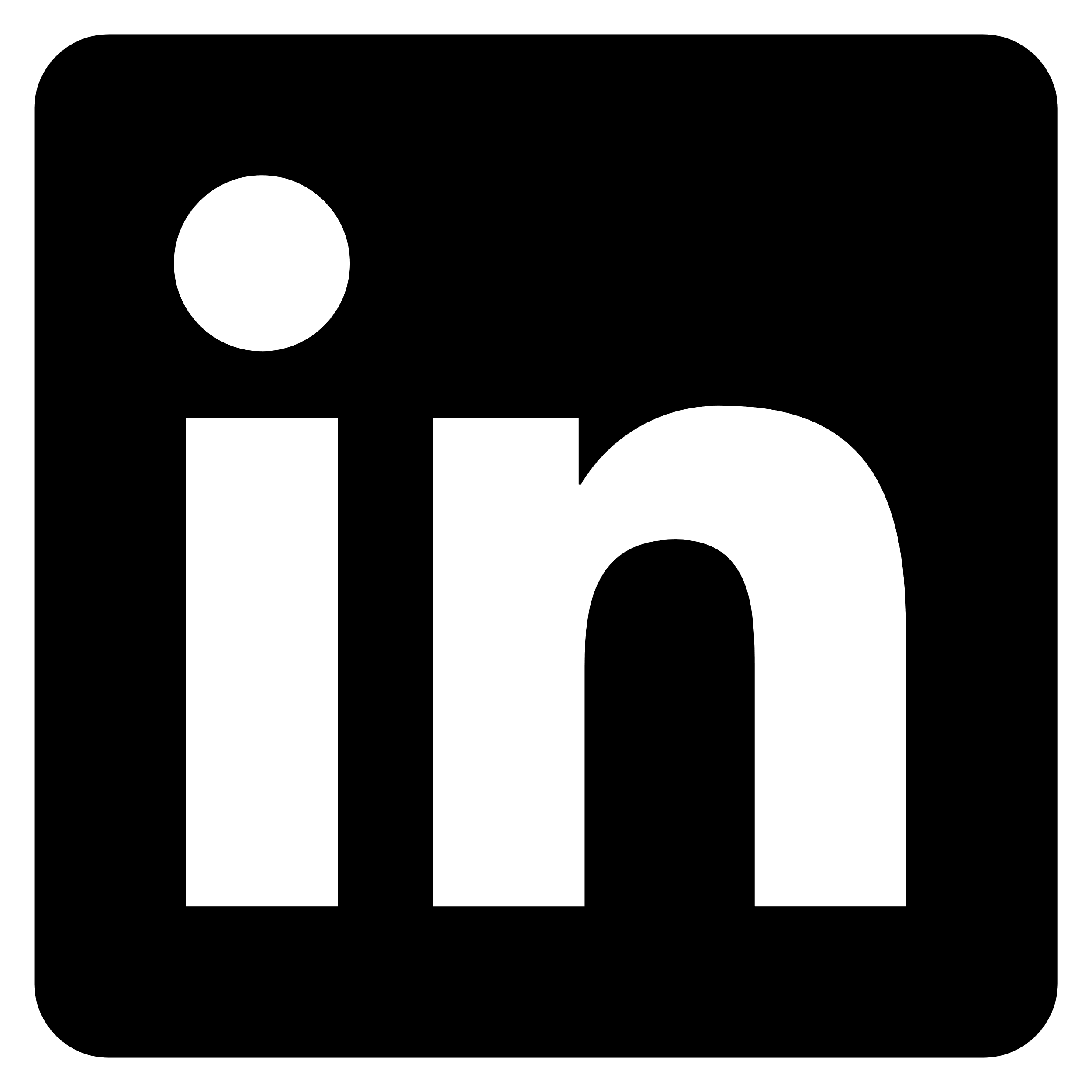
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 [LinkedIn | Toasean Elmah](https://www.linkedin.com/in/toasean-elmah-tasean-b70a66286/)

 C/O Shahidullah Meah, Kulgaon, Khaja Road, Jalalabad

Bayezid Bastami, Chattogram, Bangladesh

# PERSONAL STATEMENT

As a future graduate in Computer Science and Engineering (CSE) from University of Chittagong, I am excited to leverage my academic knowledge to real world applications. With strong leadership and teamwork abilities, I am eager to contribute to drive meaningful progress in the research and development field of IT sector. I aim to utilize my experience in the growth of the respective field.

# EDUCATION

**Bachelor of Science in Computer Science and Engineering (Ongoing),** University of Chittagong

# Obtained CGPA 3.69 out of 4.00 (Appeared)

# Higher Secondary School Certificate (July 2019), Chattogram College

# Obtained GPA 5.00 out of 5.00 in the field of Science

# Secondary School Certificate (May 2017), Kulgaon City Corporation High School

* Obtained GPA **5.00** out of **5.00** in the field of **Science**

# ACADEMIC PROJECTS

# IoT-Based Smart Health Monitoring System

# *Course: Digital Logic Design Lab | Group Project | Semester 3*

# Developed an IoT project to monitor and display room temperature, heart rate (BPM), and oxygen level (SpO₂) in real-time.

# Key Features:

# Integrated sensors for temperature, pulse, and oxygen level monitoring

# Collected and processed data using microcontroller-based hardware (e.g., ESP32)

# Displayed real-time readings on an LCD

# Applied basic data filtering and alert thresholds for health and environment monitoring

# Tools & Technologies: C/C++ (Arduino), Sensors (DHT11, Pulse Oximeter), Serial Communication

# Accounting Management System using PHP, MySQL and Chart.JS Library for Data Visualization

# *Course: Database Systems Lab | Group Project | Semester 4*

# We built an Accounting Management System using PHP, MySQL and Chart.JS Library for Data Visualization.

# Key Features of this system are:

* Add, edit, and delete entries for capital, revenue, liabilities, income, and expenses
* Generate balance sheets, income statements, journals, and ledger sheets as PDF
* Visualize income & expenses using graphs and pie charts
* Track total cash, receivables, dues - in a personal wallet interface

Proposed future enhancements are:

* Mobile banking integration
* Real-time notification system

# 539 Kernel – Educational Operating System Development

# *Course: Operating Systems Lab | Group Project | Semester 5*

# Built as a group project to explore core OS concepts through a custom kernel.

# Key Features:

# Bootloader (NASM): Loaded the kernel into memory; tested using QEMU/Bochs with diagnostic outputs and disk imaging tools (dd)

# Process Management:

# Implemented Round Robin Scheduling with fixed time quantum

# Calculated performance metrics: TAT, WT, Average TAT, Average WT

# Evaluated scheduler under varying quantum values

# Memory Management: Used segmentation and paging for process isolation (mymemory.c, shell.c for testing)

# Modular Design: Separate files for error handling, input parsing, and scheduling logic (e.g., ProcessManager.c, InputParser.c)

# TRAINING AND CERTIFICATION

# Enhancing Digital Government and Economy (EDGE)

# – Mobile App Development (Flutter) March 2025

# Participated in the EDGE Project, a national initiative aimed at developing ICT skills and promoting digital transformation in Bangladesh.

# What I Learned:

# Gained hands-on experience in Flutter for cross-platform mobile app development.

# Learned to design responsive UI with widgets, manage app state, and handle user input efficiently.

# Integrated Firebase and APIs for real-time data storage and backend communication.

# Practiced form validation, and building multi-screen apps.

# Improved problem-solving, teamwork, and mobile UX design understanding.

# COMPETITIVE PROGRAMMING ACHIEVEMENTS

# 1st Runner-Up (Girls’ Category) – Intra-department Programming Contest 2022 Achieved 2nd place among female participants in a team-based coding competition organized by the department.

# Participant – Intra-department Programming Contest, Engineering Day 2023 Showcased problem-solving and algorithmic skills in a timed environment.

# Participant – Inter-University Programming Contest, CUSS 2024 Represented department in a regional contest hosted by Chittagong University Scientific Society (CUSS), competing with students from multiple universities.

# LANGUAGES

|  |  |
| --- | --- |
| English — Fluent | Bengali — Native/Bilingual |

|  |  |
| --- | --- |
| Programming Languages: C, C++, Python, Java, PHP, JavaScriptOperating Systems & Platforms: Windows, Debian, Linux, DockerWeb Development SkillsFrontend:Languages: HTML, CSS, JavaScriptFrameworks/Libraries: ReactBackend:Languages: PHP, JavaScript, ExpressJS,MySQL, PostgreSQL, Prisma | **Simulation & Software Tools:**   * **Microprocessor:** EMU8086 * **Data Communication:** Cisco Packet Tracer * **Network Monitoring:** Wireshark  Data & Analytics:Languages & Frameworks: SPARQL, QB4OLAP, Python (NumPy, SciPy, Seaborn)Tools: Virtuoso (RDF store), MS Excel |
| **Databases:** PostgreSQL, MySQL | **Documentation & Presentation:** MS Word, PowerPoint, LaTeX |

# SKILLS