Md Hamidur Rahman Khan

☐ + 358 41 740 53 24 | ✉ hamidur.khan@student.lut.fi | ⊙ /hamidurrk | 🛅 /in/hamidurrk/

Education

Lappeenranta, Finland	LUT University	Sept 2024 - May 2027

- **Major:** Computational Engineering, B.Sc.
- **Certificate (Minor):** Software Engineering
- **Programming Coursework:** Algorithms & Data Structures, Networks, Web Development, Artificial Intelligence, Machine Learning
- **Computational Coursework:** Linear Algebra, Matrix Decomposition, Multivariate Calculus, Probabilities & Statistics

Work Experience

Web Developer	Give Bangladesh Foundation	Sept 2023 - Present

- Collaborated internationally with Awake Youth Initiative to develop a fundraising website that supports the African underserved slum communities in Nairobi, Kenya. Website link: **https://awakeyi.org/**

Coder and Trainer	Tesla Lab	Sept 2021 - Aug 2023

- Took workshops to train **400+** individuals about **integrated circuits**, **embedded systems**, **internet of things**, and **drones**.
- Built educational **Java** and **Python** games/projects like **spell checkers** and **pong games** to reinforce the interactive programming knowledge of the students.

Activities

National Coach	World Robot Olympiad (WRO)	Jan 2023 - Dec 2023

- Successfully led a **team of 3** in the **Future Innovator** segment through the national round, mainly focused on the **robotic system, software design, hardware construction, business analysis, and technical presentation**.
- Guidedtwonational teams' participation in international competition rounds, one team achieved an impressive, first time in the history of Bangladeshi participants, **5th place out of 451 global teams** at WRO '23 Panama.

President, Robotics	Notre Dame Information Technology Club	Aug 2019 - June 2021

- Mentored **45+ national robotics/project teams**, and took **14 workshops** along with **40+ robotics-oriented classes** to train more than **150+ students** in high school
- Designed a teaching module for the ICT department of my school to improve the understanding of electronics among Notre Dame College students: a combined demonstration of **clock pulse generators**, **flip flops**, **registers**, **binary counters**, and a **7-segment display** on a breadboard.

Personal Projects

Tethr	*Python, C++*

NETWORK TOWER POSITION OPTIMIZER USING MACHINE LEARNING *2023*

- An end-to-end robotic system that uses machine learning to optimize 5G network tower locations to solve the sudden loss of cellphone signal.

Block Meter	*Python, C++, Solidity*

BLOCKCHAIN-BASED ELECTRICITY BILLING SYSTEM *2022*

- **Invented** an electricity billing system that eliminated non-technical losses by **100%** and ensures transparency and immutability.
- Won a **Silver Medal** in SDG 12 national teams from 44 countries at the **International Blockchain Olympiad 2022 (Hong Kong)**.
- Secured **Bronze Medal** as the youngest developer to secure top national position in the **Bangladesh Blockchain Olympiad 2022**.

Tinker	*C++*

SEMI-AUTOMATIC HUMANOID ROBOT *2018*

- Built a **5-foot-tall** semi-automatic multi-functional humanoid robot, including greeting guests, and carrying loads.

Spectre Bot & Spectre OS	*C++*

LINE FOLLOWER ROBOT WITH CUSTOM OPERATING SYSTEM *2016-2022*

- Spectre bot is a fully custom advanced line follower robot capable of achieving a maximum of **5m/s speed** on track.
- Spectre OS is a custom operating system designed to provide advanced control and debugging capabilities for line follower robots.
- Secured **Champion position** in the **International Tech Carnival**-DRMC 2020 with Spectre Bot.

Skills

Programming	Proficient: Java • Objective-C Familiar: C • C++ • Python • SQL • Swift
Technologies	Git • XCode • Etc • Etc • Etc • Etc