

# HERO BALA

+420 608147604 | [herobala1997@gmail.com](mailto:herobala1997@gmail.com) | [linkedin.com/in/herobala](https://www.linkedin.com/in/herobala) | [github.com/HeroBala](https://github.com/HeroBala) | Brno, Czech Republic — Open to relocate

Electrical & Electronic Engineering graduate and Master's student in Open Informatics with practical experience in system performance analysis, electrical documentation, and compliance reporting. Skilled in circuit/system analysis, preventive maintenance, testing, and automation, with hands-on teaching experience in electronics and IT systems. Proficient in MATLAB, AutoCAD (basic), and simulation tools, complemented by strong analytical and problem-solving abilities. Motivated to contribute to ABB's power systems projects, supporting the design, documentation, and testing of electrical equipment for high-performance applications.

## Key Skills

- **Power Systems & Electrical Engineering:** Circuit/system analysis, compliance reporting, preventive maintenance, testing and validation.
- **Software & Tools:** AutoCAD (basic), MATLAB, Excel (Pivot, Power Query), Power BI. (*Familiar with EPLAN/E3 – willing to learn quickly*).
- **Programming & Automation:** Python, PowerShell – automation of reporting, technical calculations, and simulation data handling.
- **Documentation & Testing:** Compliance reports, technical documentation, inspection protocols, performance monitoring.
- **Soft Skills:** Analytical thinking, problem-solving, teamwork, independent task execution.
- **Languages:** English (B2), Czech (basic).

## Experience

Maintenance Performance Analyst

*AMC Knit Composite Ltd., Dhaka, Bangladesh | Jan 2021 – Dec 2021*

- Analyzed electrical/electromechanical system performance, identifying inefficiencies and implementing preventive solutions.
- Conducted root-cause analysis of system failures and proposed corrective actions.
- Prepared technical documentation, inspection records, and compliance reports to support audits and upgrades.
- Collaborated with engineering teams to ensure reliability, energy efficiency, and system uptime.

Adjunct Lecturer (Electronics & IT Systems)

*North Western University, Khulna, Bangladesh | Feb 2022 – Jul 2022*

- Delivered lectures on electronics, electrical circuits, and IT systems.
- Supervised projects on system monitoring, energy applications, and applied electronics.
- Configured and tested laboratory electrical equipment, ensuring safe operation and accuracy in experiments.

Master's Student (Open Informatics)

*Mendel University, Brno, Czech Republic | Feb 2023 – Present*

- Applied Python/MATLAB to analyze technical datasets, perform simulations, and automate system calculations.
- Collaborated on projects in infrastructure monitoring, performance testing, and sustainability analyses.
- Gained interdisciplinary experience linking IT systems with applied electrical engineering projects.

## Education

Mendel University, Brno — Master's in Open Informatics (2023 – Present)

Focus: IT systems, automation, system monitoring, and infrastructure management.

Gopalganj Science and Technology University, Bangladesh — Bachelor's in Electrical & Electronic Engineering (EEE) (2015 – 2020)

Focus: Electronics, Data Systems, and Applied Engineering Projects.

## Recent Projects:

Name	Description	Technologies Used	GitHub Link
<b>TrendSense</b>	A real-time Reddit monitoring tool that detects trending topics and sentiment using NLP and topic modeling. Ideal for public opinion and market trend analysis.	Python, Reddit API, BERTopic, Pandas	<a href="https://github.com/HeroBala/TrendSense">https://github.com/HeroBala/TrendSense</a>
<b>StitchWatch</b>	A maintenance tracking tool for monitoring machine issues, reporting faults, and supporting preventive maintenance scheduling in manufacturing.	TypeScript, JavaScript, CSS Modules	<a href="https://github.com/HeroBala/StitchWatch">https://github.com/HeroBala/StitchWatch</a>
<b>Automation Scripts</b>	A Python-based toolkit for automating daily operations such as file handling, reporting, and GitHub repository management.	Python, Pandas, GitHub CLI, OS Module	<a href="https://github.com/HeroBala/automation-scripts">https://github.com/HeroBala/automation-scripts</a>