

# Abdullah Sattar

## Software Engineer 3+Years

I write embedded code that performs under pressure and won't break

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Portfolio: [abdullahsattar.com](http://abdullahsattar.com)

## Summary of Key Skills

**Software Development, Programming, Automation, SDLC, Project management.** Repeatedly developed and maintained various software with SDLC. Worked on Linux-based architecture, integrated hardware components, and conducted unit and integration testing for reliability and performance. Experienced in communication protocols such as i2c, and GPIOs. Designed a Machine GUI using the Qt Creator tool.

C++ Development | Programming | Software Architecture | SDLC | Clean Code  
Communication | Leadership | Project Management | Problem Solving

## Technical Proficiencies

**Programming:** C/C++ development, Bash Scripting, Python Automation, Embedded Systems

**Development:** Linux Base Architecture, Hardware Abstraction Layer (HAL), Hardware Integration

**Build & Automation:** CMake, Scripting, Unit & Integration Testing, Integration with High-Level Languages

**Communication Protocols:** i2c, GPIOs, Microcontrollers

**Tools, IDEs & Systems:** Microsoft VS Code, Microsoft Visual Studio, Git, Github, Google Colab, Qt Creator

## Professional Experience

### Byonyks

Full Time, Pakistan

### Software Engineer

09/2023 - Present

Byonyks is the world's first biomedical device innovation company designing healthcare devices using medical technology. <https://byonyks.com/>

#### Task & Responsibilities:

- I develop and maintain software for Linux-based architectures using C++.
- I integrate various hardware components with software systems to ensure seamless operation.
- My work includes development in the Hardware Abstraction Layer (HAL) and the therapy layer.
- Utilize CMake and scripting for build processes and automation.
- Conduct unit and integration testing for device reliability and performance.
- I automate processes to enhance the functionality of medical technology devices.
- Possess an understanding of GPIO, I2C, microcontrollers, and software-hardware communication.
- I develop the machine system GUI using the tool Qt Creator.

## Additional Experience

### Google

### GDSC Lead

08/2022 - 07/2023

#### Accomplishments/Tasks:

- Got Selected by Google.
- Skills: Leadership, Communication.
- Organized events on AI, ML, Flutter, Google Solution Challenge, and Robotics.
- Represented FAST National University Lahore on an international level.

[Google DSC Lead 2022-2023 Badge](#)

## Education

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Bachelor of Science (BS) | Computer Science

08/2019 - 06/2023

FAST National University of Computer and Emerging Sciences (NUCES), Lahore, Pakistan

Objected Oriented Programming  
Software Engineering

Data Structures  
Artificial Intelligence

Design & Analysis of Algorithm  
Operating Systems

## Personal Projects

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Smart Platform for Investors (FYP)

10/2022 - 06/2023

- The project leveraged the MERN stack (MongoDB, Express, ReactJS, NodeJS) as its foundational knowledge areas while utilizing Visual Studio Code as the primary development tool.
- Deep learning algorithms have been effectively employed to harness the power of cutting-edge concepts.

GA to Train ANN Weights

- Genetic Algorithm to train the neural network.
- Language used: python.
- Software tool: Google Colab.

University Management System

- This project was implemented using the C++ programming language, showcasing proficiency in C++ development.
- Areas: Data Structure, Object Oriented Programming, and Software Design and Analysis.

PC Games

- Developed a Minesweeper game in C++ using Microsoft Visual Studio.
- Street Car Racing Game developed in **Assembly Language**.
- Rubik Cube Solver, Othello, and Sudoku using **Artificial Intelligence**.

## Languages

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**English:** Full Professional Proficiency

**German:** Limited Working Proficiency

**Turkish:** Limited Working Proficiency