MD IMRAN KHAN

Passport: A05185464 | **Date of birth:** 12/12/1999 | **Nationality:** Bangladeshi | **Gender:** Male |

Phone number: (+86) 19505273972 (Mobile) | **Email address:** imran0irk@yahoo.com |

Email address: mh23080@stu.yzu.edu.cn | **Website:** https://imran0irk.github.io/portfolio/ |

Website: https://orcid.org/0009-0006-4069-8759 | **Whatsapp Messenger:** 01717564030 |

Address: Yangzhou University, Yangzijing Campus, Hanjiang, Yangzhou, Jiangsu
China, 225008, Yangzhou, China (Home)

ABOUT ME

I am a graduate student at Yangzhou University, pursuing my master's in software engineering. I have proficiency in Python and C/C++. I have experience with hardware design, including Arduino and STM32 based prototyping, Linux OS, DIY projects, and FPGA synthesis. I am highly interested in robotics and embedded systems research. I am an energetic and enthusiastic person. And a self-learner who loves to accept challenges!

EDUCATION AND TRAINING

01/09/2023 – 30/06/2026 Yangzhou, China
MASTER OF ENGINEERING IN SOFTWARE ENGINEERING Yangzhou University

Thesis - Transformer neural network accelerator (FPGA)
Expected graduation - 2026

Website https://english.yzu.edu.cn/

09/2018 – 06/2022 Yangzhou, China
BACHELOR OF ENGINEERING IN SOFTWARE ENGINEERING Yangzhou University

Data Structure and Algorithms, Computer Hardware Technology, Computer Networks, Advanced Mathematics, Micro-computer principle, Software Data Analysis

Address Hanjiang District, Yangzhou, Jiangsu, China, 225012, Yangzhou, China | **Website** https://english.yzu.edu.cn/ |

Final grade 3.57 (85%) | **Thesis** Convolutional Neural Network based Human Face Recognition

WORK EXPERIENCE

EMBEDDED SYSTEMS DEVELOPER - INTERN – SEREAN SYSTEMS – 01/12/2025 – Current – KUNSHAN, CHINA

- Designing and developing Delta PLC and Delta HMI-based automation systems.
- Assisting with handling a new software project (Serean Systems)

COMPETITION: THE 7TH CHINA GRADUATE STUDENT "CHIP" INNOVATION COMPETITION "CHINA OPTICS VALLEY || HUAWEI CUP" – PROJECT: FPGA-BASED IOT INTRUSION DETECTION – 20/07/2024

School: Yangzhou University
Team: Hidden Blue
Members: Cao Ying, Ding Hongwei, Md Imran Khan
Mentor: Cao Yongzhong

EMBEDDED SYSTEMS SOFTWARE DEVELOPER - REMOTE PART-TIME – RC PRODUCT BD – Current – DHAKA, BANGLADESH

Website: www.rcproductbd.com

Programming and debugging for new product.
writing C++ code for MCU such as STM32, and interfacing with other hardware.
Schematic design.

TRAINEE SYSTEM DEVELOPER - INTERN – KINETIK DYNAMICS – 08/2022 – 01/2023 – DHAKA, BANGLADESH

Email: info@kinetik.tech │ **Website:** https://kinetik.tech

Project: IoT system development for household appliances. Tasks: Configuring and testing a series of components, application software and system management tools.

PUBLICATIONS

2025

FPGA-Optimized Transformer Network Accelerator with Efficient Softmax and Sparsity-Aware Gating

Authors: Md Imran Khan, Yongzhong Cao │ **Journal Name**: IEEE Embedded Systems Letters (Early access) │ **Publisher**: IEEE

2023

Structural analysis and material selection for biocompatible cantilever beam in soft robotic nanomanipulator

Uddin, M. S., Khan, M. I., Shafiq, S. B. BIBECHANA, 20(2), 183–189

LANGUAGE SKILLS

Mother tongue(s): **BENGALI**

Other language(s): **CHINESE (HSK 3)** │ **ENGLISH B2 (IELTS 6.0) 2023** │ **HINDI**

HOBBIES AND INTERESTS

Playing Guitar, Flying drones, Aerial photography, FPP Games, Tour

SKILLS

Programming languages

Python, C/C++, Verilog (HLS), MATLAB

Hardware skills

PLC, FPGA, Linux OS, STM32/Arduino, Sensor interfacing, debugging basic electrical and electronic systems. PCB designing (EasyEDA)

Machine learning frameworks

OpenCV, TensorFlow, PyTorch, NumPy

RESEARCH INTERESTS

Robotics and IoT

Soft robots, FPGA, Nano Drones, Agricultural robotics, Embedded Systems, Space robotics and autonomous systems

Machine Learning and Computer Vision

Computer vision and image processing, 3D vision, Multimodal Learning

UAV - Remote sensing

GeoAI, GIS, Remote sensing and IoT to improve safety and efficiency in construction, agriculture and rescue missions. 3D mapping.