



# Agha Muqarib Khan

## Software Engineer

Senior year CS student who is passionate about AI and Machine Learning. Highly-capable leader, having led multiple Senior class projects to completion. Proficient in a range of modern technologies including Python and Scala. Likes to take initiative and seek out new challenges.



aghamuqaribullah@gmail.com



0312 1250126



Karachi, Pakistan



linkedin.com/in/agha-muqarib



github.com/Agha-Muqarib

## SKILLS

Python (Django, Numpy)

Scala (Chisel)

Web Front-End (HTML, CSS, Bootstrap)

OOP, Data Structures & Algorithms

Software Engineering Concepts (SDLC Methodologies, Design and Architecture, OOAD, Requirement and Testing)

Git & GitHub

UML Diagrams

SQLite3, MySQL, Oracle Apex App Builder

Machine Learning, Deep Learning (Basic)

Linux (Ubuntu, Linux Mint)

Office Utilities (MS Word, MS Power Point, MS Excel, Microsoft Visio)

Content Writing & Blogging

## EDUCATION

### BS , Computer Software Engineering

Usman Institute of Technology aff. NEDUET

09/2018 - Present

Karachi, Pakistan CGPA: 3.2

## WORK EXPERIENCE

### Research Intern

Micro Electronics Research Lab (MERL-UIT)

08/2021 - 12/2021

Karachi, Pakistan

#### Achievement

- Implemented a parameterized RV32I Single CPU cycle Core on which I got international recognition when "RISCV International" shared my work on LinkedIn

## VOLUNTEER EXPERIENCE

### IEEE UIT Student Branch (08/2019 - Present)

Vice Chair | Content Head | xVolunteer | xGeneral Secretary | xActive Membership Chair

## CERTIFICATES

### IEEE SpectrumX'19 (06/2019)

Leaded and Ranked 1st in presenting IEEE Magazine's Article .

### Google HashCode 2020 (02/2020)

Ranked 6904th out of 10,724 Teams in Qualification Round

### Google HashCode 2021 (02/2021)

Ranked 2nd in Hub, 10th in Pakistan and 3982nd in the world in Qualification Round

## PERSONAL PROJECTS

### Handwritten to Text Transformation of Math Equations for Better Search Experience (09/2021 - Present)

- Final Year Project - An interactive web-based Deep Learning(CNN) application that lets you input handwritten math equations, convert them into LaTeX, XML, MathML and search its instances on Math Info Retrieval (MIR) systems implemented using Python and Java.

### Aghaas-Core

- Internship Project - A parametrized RV32I Single CPU Cycle core implemented using Functional Programming and parameterization in Scala and Chisel.

### E-Commerce Application

- Self Learning Project - A payment-integrated, Ecommerce web-application implemented using Django Framework of Python.

### CPEC Highway Network

- Course Project - Representation of CPEC Highway Network in Python using matplotlib.pyplot and networkx libraries.

### The StarWars Store

- Self-Learning Project - A front-end star wars Ecommerce Store made using HTML and CSS.