HIDAYAT UR REHMAN

Software Engineer | C++ | Python

@ hrehman24.fi@gmail.com 📞 (+358) 417405249 📍 Yliopistokatu 18, 90570, Oulu 🔗 https://hidayatkhan013.github.io

in www.linkedin.com/in/hidayatkhan013 hidayatkhan013

EXPERIENCE

SOFTWARE ENGINEER
LOGICIEL SERVICES LLC USA

📅 April 2024 – Present 📍 Remote

- Optimized order delivery to NYSE using modern C++, reducing latency by 20% and increasing throughput by 25%
- Implemented FIX protocol for financial trading, resulting in a 30% reduction in message processing time
- Developed a Market Data project with PostgreSQL integration, improving data retrieval by 50% and reducing storage costs by 20%
- Migrated large project from InfluxDB v1 to v2, resulting in 35% improved query performance and 15% reduction in storage.

SENIOR SOFTWARE ENGINEER
AVANZA SOLUTIONS PVT LTD.

📅 Dec 2022 – April 2024 📍 Hybrid

- Developed and optimized software solutions as Senior C++ Engineer
- Offered customer support to various banks in Pakistan
- Debugged and troubleshot software defects
- Served as resident engineer at U Microfinance Bank
- Deployed RAAST Payment system Module at U Microfinance Bank

DEVELOPMENT ENGINEER C++
SEDENIUS ENGINEERING Germany

📅 March 2022 – Nov 2022 📍 Hybrid

- Focused on developing software based on C++ for vehicle industries.
- Design and implementation of high-performance and robust solutions.
- Leveraged expertise in memory management & optimization.
- Participated in code reviews, providing feedback.
- Mentored junior engineers and shared knowledge with them.
- Completed a mega project for CARIAD – Automotive Software.
- Gained Master of CMake Certification.

RESEARCH OFFICER
SHAHEEN FOUNDATION PAKISTAN

📅 Sep 2021 – April 2022 📍 Onsite

- Worked on different technologies and developed various solutions.

EDUCATION

MASTER OF COMPUTER SCIENCE AND ENGINEERING.
university of OULU Finland

📅 2024 – 2026 In progress

LANGUAGES

C/C++ Python SQL R C#

English (B2 certified), Urdu, Pushtu

TOOLS & TECH

Git GitHub SVN CMake

Jenkins Docker Jira Redmine

Postman GDB VS Debugger

FRAMEWORKS & LIB

AUTOSAR Boost Google Test

DB & PROTOCOLS

MySQL PostgreSQL InfluxDB

RESTful API SOAP FIX Protocol

JSON XML

SD METHODOLOGIES

Agile (Scrum) Design Patterns

Object-Oriented Programming

Micro services Architecture

Continuous Integration

Test-Driven Development (TDD)

OS & DEVOPS

Linux (CentOS, ALMA Linux) Windows

CI/CD pipelines Containerization

DOMAIN KNOWLEDGE

Financial Trading Systems AUTOSAR

Stock Markets Cyber security

SOFT SKILLS

Technical Leadership MATLAB UML

Team Collaboration Problem-solving

Mentoring Microsoft Office Suite

MASTER OF CYBER SECURITY

Air university Islamabad Pakistan

📅 2021 – 2023   CGPA : 3.57/4

BACHELOR IN COMPUTER SCIENCE

Air university Islamabad Pakistan

📅 2017 – 2021   CGPA : 3.01/4

PROJECTS

Advanced persistence threats APT detection tool using Machine learning

python, machine & deep learning, numpy, data analysis, flask, network packet capturing

📅 2024

- Trained various ML and DL models for APT detection using a paid dataset.
- Developed a prototype to capture HTTP, TCP, and UDP traffic.
- Extracted features from captured traffic and passed them to an ML model deployed via Flask on a local network.

External USB plugin Monitoring Tool

c++, python, sql, socket programming

📅 2022

- Tracks external USB devices connected to the system.
- Monitors and logs details of plugged-in USB devices.
- Provides real-time alerts for security purposes.
- Useful for detecting unauthorized USB activity.

File and Directory Password Encryption and Decryption tool

python, pyqt, cryptography

📅 2023

- Open-source tool for encrypting and decryption directories and files using a password.
- Provides secure protection of data.
- Simple to use for securing sensitive files and directories.
- Available for free download and contribution on GitHub.

Dark Web Crawler BS Final Project

mongo db, socket.io, python, flask, elasticsearch, queuing, tor, beautiful soup

📅 2021

- A dark web crawler that writes URLs to "onionlinks.txt" and collects internal URLs automatically.
- Uses a queue to store URLs for crawling.
- Utilizes multi-threading and multiprocessing techniques to crawl URLs efficiently one by one.
- Designed to explore and gather data from onion sites on the dark web.

ACHIEVEMENTS

- Pakistan Cyber Hackathon 2022 (secure 14th Position.)
- Pakistan Cyber Hackathon 2021 Speed Programming (secure 8th Position.)
- Bridge Binder in Speed Programming.
- Blood Donor At Pakistan Red Crescent Society

PARTICIPATION

- IBCAST 24 (Conference)
- IBCAST 23 (Conference)

CERTIFICATION

- Python Programming: A Concise Introduction, Wesleyan University
- SQL (Basic) Certificate
- Learn C++ by Creating
- C++, Short and Sweet, Part 1
- Python (Basic) Certificate
- Crash Course on Python, Google
- C++ Tutorial for Complete Beginners
- Cyber Security Course for Beginners - Level
- The Kali OS Uses in Cyber Security
- Ethical Hacking: The Complete Malware Analysis Process
- Windows Privilege Escalation for Beginners
- General Data Protection Regulation (GDPR) 1-Day Training

RESEARCH PAPERS

- AI-Driven APT Detection Framework: Early Threat Identification using ML
- Anomaly Detection and Categorization in IOT Frameworks using Supervised Learning
- A DL Model for Network Intrusion Detection with Imbalanced Data
- Smart Passive OS Fingerprinting using a Single TCP SYN Packet
- Dark Web Data Acquisition and Analysis using Self-Reliant Crawler
- An Ensemble Learning Model for the Detection of Phishing Attacks
- Physical Fake Signature Detection using DL Model