

HIDAYAT UR REHMAN

Senior Software Engineer | Cyber Security Analyst

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SUMMARY

As a dedicated C++ Software Engineer, I've achieved significant career highlights marked by my expertise in designing and developing robust software solutions. I've successfully led the architecture and implementation of complex C++ applications, optimizing performance and enhancing code efficiency. My contributions have played a pivotal role in the successful launch of multiple projects, where I've collaborated seamlessly with cross-functional teams to deliver high-quality software within tight deadlines. I've demonstrated proficiency in debugging and troubleshooting intricate issues, consistently ensuring the delivery of stable and reliable software products. Throughout my career, I've maintained a commitment to staying updated with the latest C++ standards and best practices, enabling me to bring innovative solutions to the table. My proactive approach to mentorship and knowledge sharing has fostered a collaborative environment, enabling junior engineers to grow and excel.

EXPERIENCE

Senior Software Engineer

Avanza Solutions Pvt. Ltd.

📅 12/2022 - Present 📍 Islamabad, Pakistan

Avanza Solutions has been enabling Digital Transformation for more than two successful decades by providing digital platforms and services while facilitating the needs of banking, financial institutions, telecommunication, insurance, government, and other sectors all across the globe.

- As a Senior C++ Software Engineer at Avanza Solutions, you lead the development of complex software solutions.
- Architecting and implementing high-quality applications.
- Provided technical leadership, collaborated with cross-functional teams, and ensured the delivery of scalable and performant software.
- My expertise in C++, problem-solving skills, and continuous improvement mindset will contribute to the success of the organization.
- Customer Support to various Banks of Pakistan
- Design and implement efficient, reliable, and maintainable C++ code for various software applications and components.
- Collaborate with product managers, software architects, and other engineers to define software requirements, specifications, and architecture.
- Debug and troubleshoot software defects, proposing effective solutions and ensuring timely resolution.
- Deployed as a Resident Engineer at U Microfinance Bank.

Development Engineer

Sedenius Technologies & Engineering GMBH

📅 03/2022 - 11/2022 📍 Islamabad, Pakistan

Sedenius Technologies® Pvt. Ltd. is an Islamabad based company. Our focus is research and development in highly automated driving. Our products range from ADTF toolboxes to advance driving assistance systems and driving simulators. We offer our services in software development, particularly for AI and embedded systems. Our clients include top car manufacturing firms.

- Sedenius Technology is an innovative technology company where I worked as a C++ developer.
- At Sedenius, we focused on developing cutting-edge software solutions using C++ to address complex challenges in various industries.
- As a C++ developer at Sedenius I contributed to the design and implementation of high-performance applications, leveraging my expertise in C++ programming, memory management, and optimization techniques.
- Collaborating with a talented team, we aimed to deliver reliable, efficient, and scalable software solutions that met the specific needs of our clients.
- At Sedenius, we embraced the latest C++ standards and utilized modern development practices to create robust and maintainable code, ensuring our software applications were at the forefront of technological advancements.
- Optimize code for performance and memory usage, identifying and addressing bottlenecks and ensuring smooth execution.
- Participate in code reviews, providing constructive feedback and adhering to coding standards and best practices.
- Continuously research and stay up-to-date with the latest developments in the C++ programming language and related technologies.
- Mentor and guide junior engineers, sharing knowledge and best practices to foster a collaborative and learning-oriented environment.
- Completed one mega project for CARIAD – Automotive Software for Volkswagen.
- Gain Master of CMake Certification.

Cyber Security Research Officer

Shaheen Foundation, Pakistan

📅 09/2021 - 03/2022 📍 Islamabad, Pakistan

Company Description

- As a SOC (Security Operations Center) analyst, I specialized in cybersecurity and played a crucial role in safeguarding organizations' digital assets.
- I monitored and analyzed security alerts and incidents, investigated potential threats, and responded to security breaches.
- With a deep understanding of security technologies, protocols, and industry best practices, I implemented proactive measures to identify vulnerabilities, mitigate risks, and ensure the confidentiality, integrity, and availability of critical systems and data.
- Through continuous monitoring, incident response, and threat intelligence analysis, I helped maintain a robust security posture for the organization.
- Served as SOC Analyst L2 Support.
- modified an open-source ticketing system written in Python and MySQL to keep track of the goals of the organization.
- Honeypots Modification and Integration was my key responsibility.

EXPERIENCE

C++& Python Software Developer

Freelancer

📅 2020 - Present

Company Description

- As a freelance C++ and Python developer, I provide expertise in C++ and Python programming for various projects and clients.
- With a strong command of the language, I offer custom solutions tailored to clients' needs.
- whether it's developing efficient algorithms, optimizing code performance, or creating robust applications.
- I bring a deep understanding of software development best practices to deliver high-quality C++ and Python solutions.
- My goal is to contribute to clients' success by providing reliable, scalable, and efficient C++ and Python programming services.
- Cmake Scripting
- IOT Data Encoding and Decoding
- MOCK Testing E.g. CMOCKA
- Data Analysis and Machine learning models trainings.
- Small Flask Projects and Python programming for Cyber Security and Automation

EDUCATION

Master of Science in (Cyber Security)

Air University, Islamabad, Pakistan.

📅 09/2021 - Present

Bachelor's Degrees in Computer Sciences

Air University, Islamabad, Pakistan.

📅 09/2017 - 07/2021

SKILLS

| | | | | | |
|---------------------|--------------------------|-------------------------------|-------------------|-------------------------------|--------------------|
| Customer Support | ATM Controller | Secure Coding | Teams Work | Microsoft Service Programming | Open SSL |
| Rest and Soap Api | Multithreading | Middleware Programming | Log Analysis | SVN & Git | Socket Programming |
| C++ 17 Programming | Performance Optimization | Data Structures | Machine Learning | Unit Testing and TDD | |
| Network Programming | CMake Scripting | Debugging and Troubleshooting | Memory Management | Python Scripting | |
| Flask | ADMA | CAN | Jenkins | UDP TCP/IP | Ethernet |
| | | | Canoe | GenSys | SOMEIP |
| | | | | Veles | Redmine |
| Valgrind | Slack | Scrum | Agile | Deep Learning | |
| SOC | Honeypots | IPS & IDS | Metasploit | Ubuntu | Kali Linux |
| | | | | VMware | CTI |
| | | | | Malware analysis | Firewalls |

DEVELOPMENTS CERTIFICATION

| | | |
|-------------------------------|-------------------------------------|-------------------------------------|
| SQL (Basic) Certificate | Python Programming by Wesleyan Univ | Beginning C++ Templates |
| C++, Short and Sweet, Part 1 | Master CMake for Cross-Platform C++ | Python (Basic) Certificate |
| Crash Course on Python Google | Learn C++ by Creating | C++ Tutorial for Complete Beginners |

CYBERSECURITY CERTIFICATIONS

| | | |
|--|---|--|
| Windows Privilege Escalation for Beginners | Deep Web- The complete Introduction to the hidden web | Ethical Hacking: The Complete Malware Analysis Process |
| Kali OS Uses In Cyber Security | Cyber Security Course for Beginners - Level | Stay Anonymous Online – Darknet, TOR, WHONIX, Tails & kali |

RESEARCH PAPERS

- Anomaly Detection and Categorization in Internet of Things Frameworks using Supervised ML
- Recurrence of Cancer Prediction using ML
- A Deep Learning 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
- Network Intrusion Detection Model based on Deep Learning Techniques
- Physical Fake signature detection using Deep Learning model

TRAININGS

- General Data Protection Regulation (GDPR)
- ISO 27001 1 Day Training
- How to ace your interviews by Nestle
- FREELANCING course under DigiSkills Training Program
- GRAPHIC DESIGN course under DigiSkills Training Program

AWARDS

- Pakistan Cyber Hackathon 2022
- Pakistan Cyber Hackathon 2021 Speed Programming
- Bridge Binder in Speed Programming Air University
- Best Logo & Poster Designer By Air University
- Blood Donor At Pakistan Red Crescent Society

PROJECTS

File and Directory Password Encryption and Decryption tool

https://github.com/hidayatkhan013/File_and_directory_password_encryption_tool.git

A Small Tool which can Encrypt and Decrypt the Files and Folders using password.

External USB plugin Monitoring Tool

<https://github.com/hidayatkhan013/External-USB-plugin-Monitoring-Tool.git>

External USB plugin Monitoring Tool is a tool which you can track which external device is connected to the system

Dark Web Crawler Public

<https://github.com/hidayatkhan013/Dark-web-Crawler.git>

A Small crawler which write it in the onionlinks.txt then the crawler will automatically collect the internal urls and save it a queue and the crawler will start crawling the urls one by one using multithreading and multiprocessing technique.

Surgical Tool Images Classification directory automation tool

<https://github.com/hidayatkhan013/Surgical-Tool-images-Classification-directory-automation-tool.git>

first covert all video to frames and the use this tool to move the images to separates directories this is full automated tool you just have to change the video name in the code for example I do this on video_2

Automate GitHub uploading using python

<https://github.com/hidayatkhan013/Automate-github-uploading-using-python.git>

A small tool Which automate the GitHub process.

INDUSTRY EXPERTISE

C++



Python



CMake



Jenkins



Git



GO



LANGUAGES

ENGLISH

Proficient



URDU

Native




Pushto

Native



 **Hacker Rank**
hidayatkhan013

 **GitHub**
hidayatkhan013

 **Behance**
HH_graphics