

Muhammad Shahis

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PROFILE

Aspiring Software Engineer & Blockchain Developer specialized in the Java Spring Boot ecosystem and Decentralized Finance (DeFi). Proven track record of building secure, scalable backend architectures and multi-chain wallet systems. Passionate about bridging the gap between traditional enterprise systems and Web3 technologies.

EDUCATION

- Bachelor of Science in Computer Science (BSCS) | University of Mianwali
Expected Graduation: 2026 | Mianwali, Pakistan
- Intermediate in Computer Science (ICS) | Govt. Higher Secondary College (M&LW)
2020 – 2022 | Makerwal, Mianwali

SKILLS

🔧 Technical Skills

Core Java & Object-Oriented Programming

- Strong command over **Object-Oriented Programming (OOP)** concepts: *Inheritance, Polymorphism, Encapsulation, Abstraction*
- Solid foundation in **Data Structures & Algorithms (DSA)**
- Expertise in **Java Collections Framework**: *List, Set, Map, and Stream processing*
- Java 8+ Features**: *Lambda Expressions, Stream API, Functional Interfaces, Optional, Date & Time API*
- Exception Handling, File I/O, Multithreading & Concurrency, Generics**
- JavaFX & Swing**: Desktop applications including encryption visualizers and interactive simulations

Spring Boot & Backend Development

- Spring Boot** for building scalable and secure backend applications
- Spring MVC**: RESTful API development using *Controller–Service–Repository* architecture
- Spring Security**: Authentication & authorization using *Form Login, JWT, OAuth 2.0*
- Spring Data JPA / Hibernate**: Entity mapping, relationships, CRUD operations, and performance optimization
- Spring Validation, AOP, Actuator**, and externalized **Configuration Management**
- Database Integration**: MySQL with JPA/Hibernate
- API documentation & testing using **Postman** and **Swagger (OpenAPI)**

Blockchain & Web3 Development

- Web3j (Ethereum SDK)**:
 - Smart contract interaction
 - Wallet generation using mnemonic phrases



- Transaction creation and management
 - **Bitcoinj Library:**
 - Bitcoin wallet creation
 - Transaction signing and broadcasting
 - **Multi-chain Support:** Ethereum and Bitcoin-based networks
 - Secure **private key management**, transaction signing, and blockchain security best practices
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Frontend Development

- **HTML5, CSS3, JavaScript (ES6+)**
 - **React (Basic)** for component-based UI development
 - Responsive UI design and seamless **API integration with Spring Boot backends**
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❖ Tools & Technologies

- **Version Control:** Git, GitHub
 - **Build & Dependency Management:** Maven
 - **Containerization:** Docker (Basic)
 - **API Tools:** Postman, Swagger
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PROJECTS

❖ Career Key — Decentralized Document Verification System for HEC (FYP)

Tech Stack: Spring Boot, Web3j, Ethereum Smart Contracts, IPFS, MySQL

Live:  <https://hec-nexus.netlify.app/>

Frontend Repo:  https://github.com/Shahiskhan/career_key_frontend

Backend Repo:  <https://github.com/Shahiskhan/career-key-backend>

- Blockchain-based degree attestation & verification platform
- Document hashing (SHA-256) with secure storage on IPFS
- Smart contracts for verification records on Ethereum
- Spring Boot backend integrated with blockchain APIs
- Final Year Project (FYP)

Dook-Gold — Multi-Wallet Blockchain System

Tech Stack: Spring Boot, Web3j, Bitcoinj, MySQL, JWT, OAuth 2.0, HTML, CSS, JavaScript

Live:  <https://doog-gold.netlify.app/>

Repo:  <https://github.com/Shahiskhan/Dook-gold>



- Multi-wallet system supporting up to 20 blockchains
 - Wallet generation using mnemonic phrases
 - Transaction management for 12–13 blockchain networks
 - Secure APIs with JWT & OAuth 2.0
 - Basic wallet management frontend
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Smart Contact Manager

Tech Stack: Spring Boot, Spring Security, MySQL

Live:  <https://smart-contact-manager.onrender.com> (Not yet)

Repo:  <https://github.com/Shahiskhan/SmartContactManager>

- Secure contact management with user authentication
 - Role-based access control using Spring Security
 - CRUD operations with MVC architecture
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Blog App — Backend REST APIs

Tech Stack: Spring Boot, Spring Data JPA, JWT, MySQL

Live:  <https://blog-api-demo.onrender.com>

Repo:  <https://github.com/Shahiskhan/Blog-app-backend>

- REST APIs for users and blog posts
 - JWT-based authentication & role management
 - Clean and scalable backend architecture
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Nature Daily — Wisdom & Bounty Platform

Tech Stack: React (Vite), Tailwind CSS, Framer Motion, React Router, Swiper.js

Live:  <https://nature-daily-wisdom-bounty>

Repo:  <https://github.com/Shahiskhan/Nature-s-Daily-Wisdom-Bounty>

- Modern, interactive web platform focused on **nature awareness and wellness**
 - **1000+ searchable daily nature facts** with clean and immersive UI
 - **Seasonal food calendar** for fruits & vegetables (month-wise)
 - Health & wellness insights based on **science-backed nature benefits**
 - High-quality **nature gallery** and **plant encyclopedia cards**
 - Fully responsive UI with smooth animations and fast performance
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Semester Projects

1. RetailHub — Backend APIs

Robust and scalable E-commerce backend APIs built with Spring Boot.

Repo:  [RetailHub-Backend-APIs](#)

2. Simple Cipher Tool — JavaFX

Interactive desktop app for visualizing basic cryptographic algorithms.

Repo:  [Simple-Cipher-Tool-JavaFX](#)

3. Enigma Machine Simulator — JavaFX

Historically accurate Enigma machine simulator with step-by-step encryption.

Repo:  [Enigma-Machine-Simulator](#)

4. AES Encryption Visualizer — JavaFX

Desktop app to visualize step-by-step AES encryption for learning purposes.

Repo:  [AES-ENCRYPTION-VISUALIZER](#)

Strengths

- Strong understanding of **Java internals** and the **Spring ecosystem**
- Passionate about **blockchain, security, and decentralized systems**
- Excellent **problem-solving** and **research-oriented** mindset
- **Fast learner** with a practical, hands-on development approach

Career Objective

To work as a **Full-Stack Java & Blockchain Developer**, building **secure, scalable, and innovative systems** using **Spring Boot** and **Web3 technologies**, while applying strong software design principles to solve real-world problems in the **education and finance** domains.

