Muhammad Yahya

Software Engineer

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SUMMARY: Software Engineer with expertise in Machine Learning, Blockchain Development, and Full-Stack Web Development.

Proven track record in delivering scalable, secure, and innovative solutions across fintech, AI-driven trading, and DeFi ecosystems. Adept at designing Ethereum smart contracts, integrating machine learning models, and building robust backend architectures with cutting-edge technologies such as Python, JavaScript/TypeScript, Solidity, and frameworks like React.js and Next.js.

Skilled at managing complex projects independently and collaborating in team-driven environments to create impactful applications.

SKILLS: Python | JavaScript | Solidity | C++ | C# | Unity | ReactJs | Tensorflow | NodeJs | PyTorch | UnrealEngine | NextJs | Machine Learning | Blockchain Development | Full-Stack Development | Ethereum Virtual Machine (EVM) | Distributed Protocols Architecture | Solidity Development | Smart Contract Maintenance | Adaptablity | Problem Solving | Eloquent Speaking | Articulate Communication | Team Collaboration | Critical Thinking |

PROFESSIONAL EXPERIENCE

Ocean Money (2022 – Present)   *Remote*

FinTech Platform that includes banking, cryptocurrency, and investment solutions
Middle Software Developer

- Developed and maintained backend architecture for fintech web applications using Node.js, Python (Flask/Django), and TypeScript, ensuring scalability, performance, and security, leading to a 30% improvement in API response times.
- Implemented AI-driven trading bots leveraging Python and machine learning frameworks like TensorFlow and PyTorch, automating decision-making processes in diverse financial markets, resulting in a 25% increase in trading efficiency.
- Engineered FlashLoan-based arbitrage bots using Solidity on the Ethereum blockchain, optimizing transactions for profit across decentralized exchanges (DEXs) like Uniswap and SushiSwap, achieving up to 15% profit per trade cycle.
- Spearheaded the development of a decentralized finance (DeFi) platform, utilizing Solidity, Hardhat, and web3.js, enabling seamless and secure financial transactions that handled over $10 million in Total Value Locked (TVL).
- Created a secure blockchain-powered digital wallet solution with React.js for the frontend and web3.js/ethers.js for real-time asset management and trading, achieving a 20% increase in user retention due to an intuitive interface and reliable performance.
- Led the design and deployment of decentralized applications (DApps) on Ethereum, implementing smart contracts with Solidity and integrating with frontend technologies like React and Next.js, reducing development time by 15% through reusable components.
- Integrated blockchain solutions with machine learning models using Python, enhancing automated trading strategies by leveraging financial data and improving trading performance by 20%.

Invozone (2019 – 2021)   *Isb, Pakistan*
Leading software outsourcing company on Pakistan market helping businesses grow.

Web Developer

- Delivered modern web applications using React, JavaScript, and SharePoint Framework, improving application speed and reliability, leading to a 40% increase in user satisfaction based on client feedback.
- Customized Microsoft 365 solutions for 10+ enterprise clients, tailoring functionalities to align with organizational needs, resulting in a 20% boost in team productivity through enhanced workflows.
- Led the redesign of legacy applications, incorporating modern frameworks and optimizing performance, achieving a 30% reduction in page load times.
- Deployed robust web solutions supporting over 100 concurrent users, ensuring seamless performance during peak usage.

10Pearls (2017 – 2018)   *Isb, Pakistan*
Global software development organization with 1000+ branches worldwide

Software Developer

- Built RESTful APIs to support web and mobile applications, ensuring efficient data exchange and seamless integration with client systems.
- Optimized existing software systems by refactoring code and improving database performance

using SQL and PostgreSQL, leading to a measurable increase in application efficiency.
- Collaborated with cross-functional teams including UI/UX designers and front-end developers to deliver high-quality, end-to-end software solutions.
- Implemented unit and integration tests using PyTest to ensure code reliability and robustness, reducing bugs and improving software maintainability.
- Automated repetitive tasks and reporting workflows with Python scripts, saving time and enhancing operational efficiency for internal and client projects.

EDUCATION

Yunnan University   *Kunming, China*
Software Engineering (2018 – 2022)
Level in EQF 6

ADDITIONAL INFORMATION

- **Languages**: Pushto (native), Urdu (native), English (C2/Advanced), Chinese (A2/Beginner)
- Passionate about urban tech innovations and AI-driven systems, demonstrated through impactful side projects combining creativity and technical expertise.
    Here are some of my pet projects:
    Synthetic City Data Generator (SCDG): Designed a tool to generate synthetic urban data, enabling testing and development for smart city applications.
    Pedestrian Detection Sensitivity Analysis (PDSA): Improved pedestrian detection systems through machine learning techniques, enhancing safety for autonomous vehicles.