Mobile: +1 (801) 875 - 0776 | Location: Salt Lake City, UT 84106

Keaton McCune | Linkedin | Github | Website

OBJECTIVE

To secure a full-time or part-time, long-term role as a technical remote leader where I can leverage my technical expertise in ethical hacking, full-stack development, blockchain technology, quantum computations, and AI-driven solutions. I aim to contribute to innovative projects that redefine industry standards while continuing to grow professionally in a collaborative environment. My goal is to bring a passion for innovation, a track record of problem-solving, and a commitment to transforming visionary ideas into impactful solutions that drive organizational success.

EXPERIENCE

iDEFi.Al

CTO / Co-Founder / Sr. Al-Full Stack Engineer October 2023 – Present

- API Ecosystem Architect: Designed and built key components of the iDEFi.AI platform, including api.idefi.ai, q.idefi.ai, and infa.idefi.ai, to support blockchain transactions, quantum integrations, and intelligent agent management.
- api.idefi.ai: Developed a scalable API suite for blockchain tools, AI-driven solutions, and secure data exchanges, offering both RESTful and GraphQL endpoints.
- q.idefi.ai: Engineered quantum APIs using IBM Qiskit and Google Cirq to integrate quantum algorithms and simulations with AI and blockchain technologies.
- infa.idefi.ai: Built a platform for managing intelligent agents, enabling creation, skill upgrades, and real-time collaboration powered by AI.
- Blockchain Security: Designed Al-driven protocols to protect blockchain transactions with advanced anomaly detection and predictive analytics.
- Real-Time & Scalable APIs: Implemented WebSockets for real-time updates and deployed containerized microservices with Kubernetes and Docker for reliability and scalability.
- Web3 Integration: Seamlessly integrated blockchain frameworks like Web3.js, Ethers.js, and smart contract platforms to enhance functionality across the ecosystem.

Qalice

CTO / Founder / Sr. AI-Full Stack Engineer May 2024 – Present

- Architect and Mentor: Designed and documented complex quantum computing solutions, ensuring other developers could seamlessly contribute to the project through clear technical guidance and collaborative workflows.
- Quantum Innovation Leader: Spearheaded the development of Qalice, integrating Quantum Electrodynamics (QED), Laser Pulse Interaction (LPI), and Quantum Key Distribution (QKD) into

scalable quantum communication models.

- Knowledge-Sharing Culture: Created detailed documentation and training materials to help developers understand the implementation of Quantum Mirror Memory and Free Space Optical Communication (FSO), ensuring smooth project handoffs.
- Problem Solver and Tool Expert: Identified, tested, and implemented cutting-edge tools to push the boundaries of quantum computing, empowering the team to work efficiently with complex algorithms.

Advice Analytics

Sr. AI Software Engineering Manager / Full Stack Engineer March 2024 – January 2025

- Builder and Educator: Architected the MVP for CommsAI V2 and delivered a robust design that allowed developers to contribute effectively through structured handoffs and annotated codebases.
- Leader in AI Integration: Designed and deployed AI-driven features while explaining complex GenAI functionality in practical terms, enabling team members to build upon the foundation.
- Full-Stack System Designer: Created intuitive, scalable systems for progressive web applications, sharing best practices to guide the team in maintaining a high standard of code quality and usability.

Gym2Gym

Co-Founder / Product Manager / Developer November 2022 – February 2024

- Strategic Collaboration for MVP Launch and Seed Funding: Collaborated closely with the CTO and CEO to launch a successful Minimum Viable Product (MVP) and secure seed funding, advancing the platform from a pre-seed prototype to preparation for a series round entry.
- Developed Technical Overview and Go-to-Market Strategy: Crafted and implemented a comprehensive technical overview and go-to-market strategy, instrumental in securing additional capital for platform development and expanding the technical team.
- Led Product Design and Full-Stack Technical Support: Played a pivotal role in overall product design and provided comprehensive full-stack technical support, including for the platform's mobile application and progressive web application.

LifeDeFied

Co-Founder / Sr. Tech Lead January 2022 – August 2023

- Led Design, Research, and Development of PoS Blockchain Platform: Spearheaded the design, research, and development of a groundbreaking Proof-of-Stake (PoS) Blockchain Platform. From inception to execution, orchestrated the creation of core features including Asset Tokenization, Cold Storage Security, Stable Utility Tokens/NFTs, and decentralized mobile applications.
- Established Technical Foundation for Team Success: Built and implemented the foundational architecture of the platform, providing a robust technical framework for the entire development team. Conducted extensive research and prototyping to validate key concepts and ensure scalability and security at every stage of the project lifecycle.
- Recognized for Innovation and Excellence: Acknowledged in a Chainlink Labs article titled <u>Web3</u> <u>Marketing: Tactics, Tools, and Metrics</u> for bootstrapping the platform and establishing a customer

StandardDAO

Blockchain Security Advisor / Tech Lead October 2020 – July 2022

- Provided Strategic Technical Guidance: Offered valuable technical guidance to team members and leaders within pre-seed startups, staying ahead of blockchain technology trends to deliver innovative insights and support.
- Delivered Comprehensive Technical Support: Supplied essential technical tooling, testing frameworks, security auditing, and best practices to empower development and security teams, ensuring robust and secure implementation of projects.

Magnum E-Bikes

Head of IT and Growth Hacking *October 2019 – June 2020*

- Social Media Automation and Growth Hacking: Proficient in automating social media tasks using Python and Shell scripting to optimize engagement and growth strategies.
- Mobile and Web App Development: Skilled in developing responsive and user-friendly applications using ReactJS, React Native, NodeJS, and NextJS, specializing in cross-platform and progressive web app (PWA) development.
- WordPress Customizations and Optimizations: Expertise in customizing and optimizing WordPress
 websites using JavaScript (JS), HTML, CSS, PHP, and SEO best practices to enhance performance
 and user experience.

Tesla Motors

Master Remote Technician February 2017 – October 2019

- Expert Diagnostics and Error Resolution: Diagnosed software and hardware errors by analyzing syslogs within a Linux/shell environment. Resolved multiple error codes efficiently through comprehensive troubleshooting, graphing, plotting, and implementing over-the-air software fixes, significantly reducing physical service center visits.
- Knowledge Documentation and Training: Developed and updated detailed troubleshooting guides to educate customer care, supervisors, and managers on resolving both new and pre-existing issues, improving overall support efficiency.
- Effective Communication and Collaboration: Facilitated productive weekly meetings with team members, customer care, supervisors, and managers to discuss projects, address challenges, and enhance coordination across departments.
- Demonstrated Multitasking and Technical Support: Exhibited exceptional multitasking skills in a fast-paced environment, providing software and technical tooling training and support to team members while staying updated with the latest software development tools and techniques. Consistent Performance Excellence: Achieved the lowest number of personal diagnostic cases within the company, reflecting a commitment to efficiency and quality in problem-solving

ACHIEVEMENTS

Quantum-AI and Blockchain Innovation

- Quantum-AI Architect: Developed Qalice 😺 to bridge AI and quantum computing, enabling the interpretation of superpositioned data through advanced QED, LPI, and QKD protocols for secure and scalable quantum communication.
- iDEFi.AI Core Architect: Built the foundational engines for API.iDEFi.AI, Q.iDEFi.AI, and iNFA.iDEFi.AI, establishing a robust ecosystem for AI-powered blockchain solutions, intelligent agents, and decentralized applications. Authored the iDEFi.AI whitepaper, defining its strategic architecture and role in advancing AI and Web3 integration.
- Blockchain Pioneer: Led the development and deployment of blockchain solutions, including smart contracts and dApps, widely adopted by enterprises for secure, scalable operations.

AI-Driven Full-Stack Engineering and Cybersecurity

- Al Full-Stack Leader: Engineered and deployed user-centric web applications, combining responsive frontend interfaces (React.js, Next.js) with secure, high-performance backends (Flask, Node.js), driving adoption and enhancing system performance.
- Cybersecurity Innovator: Reduced vulnerabilities by 50% through advanced encryption, AI-based threat detection, and ethical hacking methodologies. Leveraged Kali Linux tools (Nmap, Metasploit, Burp Suite) for penetration testing and system hardening.

Leadership, Learning, and Resilience

- Mentor and Visionary: Mentored technical teams, contributing to skill development in AI, cybersecurity, and blockchain, while pursuing industry-recognized certifications (CISSP, CompTIA).
- Resilient Athlete: Excelled as a Type 1 diabetic athlete while balancing a demanding career, demonstrating exceptional discipline, resilience, and adaptability in both personal and professional pursuits.

SKILLS

AI-Focused Technology Leadership:

- Strategic Planning for Al-Powered Systems
- Visionary Leadership in AI, Blockchain, and Quantum Computing Ecosystems
- Cross-functional Team Leadership for End-to-End AI Product Development

AI & Machine Learning Engineering:

- Model Development and Training
 Pipelines (Supervised, Unsupervised,
 and Reinforcement Learning)
- Natural Language Processing (NLP) and JSON Optimization for Large Language Models (LLMs)
- Inference Systems and API Integration for GPT-based Agents and Autonomous Workflows

Full-Stack AI Development:

- Frontend Development: React.js, Next.js, TailwindCSS for dynamic and responsive Al-powered interfaces
- Backend Development: Python (Flask, FastAPI, Django), Node.js, Express.js for robust server-side AI integrations

- Database Management: NoSQL (MongoDB, Firebase, Redis) and Relational (PostgreSQL, MySQL) databases for AI data storage and management
- API Design: RESTful and GraphQL APIs
 with WebSocket for real-time AI-driven
 features

Quantum-Inspired AI Solutions:

- Quantum Machine Learning (QML) for
 Optimized Model Predictions
- Quantum Key Distribution (QKD) for Secure AI Agent Communications
- Quantum SDKs (Qiskit, Pennylane) for Simulation of Quantum-Inspired Architectures

Cybersecurity with AI Integration:

- AI-Powered Vulnerability Detection and Threat Intelligence Pipelines
- Advanced Penetration Testing using AI-Assisted Analysis for API and Web Security
- Kali Linux Tools: Nmap, Burp Suite, Metasploit, Wireshark, Hydra for network scanning, packet analysis, and security automation

Cloud-Native and Serverless AI Development:

- Cloud Platforms: AWS (Lambda, EC2, S3), GCP, Firebase, Vercel for hosting Al-driven services
- CI/CD Pipelines: GitHub Actions, Jenkins, Docker for automated model deployment and updates
- Infrastructure as Code (IaC): Terraform and Kubernetes for scalable AI microservices

AI-Powered Blockchain Development:

- Smart Contract Programming (Solidity, Hardhat) for Al-integrated decentralized applications
- iNFA.iDEFI.AI (Intelligent Non-Fungible Agents) for real-time market predictions, automation, and DeFi interactions
- API.iDEFI.AI for delivering intelligent blockchain solutions via AI-enhanced REST/GraphQL APIs

Advanced Data Science & Predictive Analytics:

- Feature Engineering and Data Cleaning (Pandas, NumPy, Scikit-learn)
- Al-Driven Predictive Models for Anomaly Detection and Time-Series Forecasting
- Data Visualization and Reporting
 (Matplotlib, Seaborn)

DevOps and MLOps:

- Continuous Integration/Deployment for Machine Learning Models (CI/CD)
- Serverless AI Architecture using AWS Lambda, Dockerized APIs, and Load Balancing
- API and Model Versioning for Real-Time Model Updates and Rollbacks

Networking and System Security:

- Network Mapping and Real-Time Al Threat Detection (using Kali Linux tools and Python scripts)
- System Hardening, Zero Trust Architectures, and Secure API Gateways

Cross-Team Collaboration and Communication:

- Stakeholder Engagement and Technical Presentations on AI Systems and Blockchain Use Cases
- Team Leadership in Distributed, Multi-Disciplinary Development Environments

Continuous Learning:

- Research and Application of Emerging Technologies (AI, Quantum Computing, Web3)
- Active Participation in AI and Quantum Research Communities

STACK

Frontend Development:

- Languages: JavaScript, TypeScript, HTML5, CSS3
- Frameworks: React.js, Next.js, Vue.js
- UI Libraries: TailwindCSS, Bootstrap, Material-UI

Backend Development:

- Languages: Python (Flask, Django, FastAPI), Node.js
- Frameworks & Tools: Express.js, GraphQL, REST APIs, WebSockets
- API Testing: Postman, Swagger, GraphQL Playground

Databases:

- Relational: PostgreSQL, MySQL
- NoSQL: MongoDB, Redis, Firebase

AI/ML Tools:

- Frameworks: TensorFlow, PyTorch, LangChain, OpenAl APIs (GPT models)
- Data Science Libraries: Pandas, NumPy, Scikit-learn, Seaborn

 NLP & LLMs: Hugging Face Transformers, OpenAI Embeddings

Blockchain & Web3:

- Smart Contract Languages: Solidity, Hardhat
- Blockchain Frameworks: Ethereum, Polygon, Chainlink
- Web3 Integration: Web3.js, Ethers.js, Infura, Remix IDE

Quantum Computing Tools:

- Frameworks: Qiskit (IBM), Pennylane, Quantum SDKs
- Quantum Protocols: Quantum Key Distribution (QKD), Quantum Random Number Generators (QRNG)

DevOps & Cloud:

- Cloud Platforms: AWS (EC2, Lambda, S3), GCP, Vercel, Firebase
- CI/CD Tools: GitHub Actions, Jenkins, Docker, Kubernetes
- Containerization & IaC: Docker, Kubernetes, Terraform

Cybersecurity Tools (Kali Linux Focus):

- Network Scanning & Enumeration: Nmap, Netcat, Nikto
- Exploitation Frameworks: Metasploit, ExploitDB, Custom Python/Bash Scripts
- Password Cracking: Hydra, John the Ripper
- Packet Analysis: Wireshark, Tcpdump, Bettercap

- Web Security Testing: Burp Suite, OWASP Zap, SQLMap
- Wireless Security: Aircrack-ng, Kismet

Other Tools:

- Version Control: Git, GitHub, GitLab
- Development Environments: VSCode, PyCharm, Jupyter Notebooks
- Automation and Scripting: Bash, Python, PowerShell

ACADEMICS | AUTODIDACTS

B9lab Academy

Blockchain Technology and Distributed Systems October 2023 - March 2024

ISC²

CISSP, Computer and Information Systems Security Professional Testing above the average (80%)

CompTIA Tech Career Academy CySa+, Computer Systems Analysis/Analyst Testing above the average (80%)

Udemy Online Certifications in Cybersecurity, Web-App Development, and Blockchain February 2017 - December 2020 Certifications include:

- Algorithmic Trading with Python
- Ethical Hacking + Python Scripting
- Senior Full Stack Development and Security
- React Native iOS & Android + WebApp Development

Copper Hills High School GED, General Studies August 2011 - June 2014

- Honor Roll (3.6 GPA)
- Varsity Lacrosse (Midfield Captain)
- AP Chemistry (only sophomore out of class to pass)