

METHODOLOGIES

Scrum
Kanban
Agile
TDD
DDD
...

ARCHITECTURE

OOP Design
MVC
MVVM
SOA
Microservice
Serverless
Client-Server
Event-Driven
Async
...

SKILLS

C/C++
C#/.NET
Node JS
Javascript
Python
Java
Go
Haskell
Assembler
Solidity
FP
Blockchain
many others...

BLOCKCHAIN

Solidity
Geth
Truffle
Hardhat
Ganache CLI
3Box API
C/C++
...

ML/AI

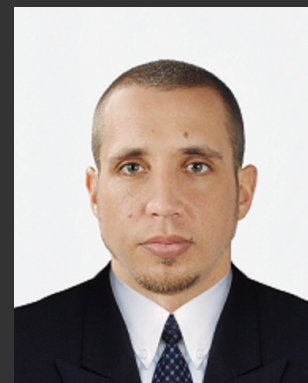
Python
Tensorflow
Keras
Matlab
Jupyter Labs
...

JOHN R. KOSINSKI

Senior Software Engineer/Architect

PERSONAL INFO

Citizenship: US
john.kosinski@gmail.com



ARCHITECT, LEADER, DEVELOPER

- **problem solver**
- **pragmatic and empirical**
- **creative and intuitive**
- **rigorous tester**

SAMPLING OF RECENT WORK

STREAM FINANCE: DEFI ARCHITECTURE

Location: Remote
Client: Stream Finance (US)
Dates: 2022-2023

- Architected and developed a dApp, one of the first of its kind, that allows users to buy into a US Treasury Bond fund on the blockchain. Launched on BSC and Ethereum blockchains. Won the race to market before competitors.
- Architected and developed a secure off-chain system to automate vault sweeps and other processes related to the Treasury Bond vault systems.
- Conducted technical research to assess the feasibility of various potential automated hedge fund strategies in the blockchain space.
- Implemented rigorous testing and security for on-chain blockchain products.

TECH STACK

Blockchain, Ethereum, BSC, Solidity, Hardhat, Echidna, Typescript/NodeJS, AWS

SKILLS

Smart Contract Design/Architecture, Web3, Ethereum Development, Solana, Binance SmartChain, Tron, Full-stack Architecture/Development, TDD, Automated Testing, Security Penetration Testing, Blockchain Security

INDUSTRIES

Blockchain, Defi, Finance, Hedge Fund

MOBILE

Android
IOS
Xamarin
React Native
Objective C
Swift
React Native

IoT

Embedded
Arduino
Open RTOS
AWS IoT
Alexa
ESP8266/32

WEB

NodeJS
Typescript
Jquery
React
NestJS
Python
Flask
ASP.NET
...

DATABASES

SQL Server
MySQL
MongoDB
DynamoDB
Perforce
PostgreSQL
...

LANGUAGES

English (native)
Thai (fluent)

AXIOMSYS: STARTUP R&D

Location: Remote
Client: Axiomsys (Poland)
Dates: 2022-2022

- Planned and estimated project packages for non-fungible and fungible token development, front-end minting and administration websites with React, and security audits of smart contracts.
- Researched, planned, and presented the integration of fungible and non-fungible tokens with the Unity game engine back end of a well-known online meeting venue.
- Contacted, vetted, and interviewed blockchain developers, laying the foundations for an elite international team of blockchain warriors.
- Developed, planned, and documented a methodology for security audits of smart contracts.
- Provided expert technical consultation during sales meetings.

TECH STACK

Blockchain, Solidity, Rust, Typescript, NodeJS, Python

SKILLS

Architecture, R&D, Consulting, Documentation, Presentation

INDUSTRIES

Blockchain

GARBLES LABS: BLOCKCHAIN DEVELOPMENT

Location: Remote
Client: Garbles Labs (International)
Dates: 2022-2022

- Ported a Typescript SDK for well-known Solana market maker Orca Whirlpools to C#/.NET for use in Unity Game Engine and made it open for community usage.
- Developed the SDK for .NET, refactored as necessary, and added a suite of automated tests to ensure its quality.
- Interfaced with the Rust smart contracts and modified the Rust code as needed for testability.

TECH STACK

Solana, Rust, C#, Typescript, Unity Engine

SKILLS

Blockchain, Solana, Market-Making Software, unit testing, TDD

INDUSTRIES

Defi, Gaming, Blockchain, Market Making

ALTERYX: C++ DEFECT MANAGEMENT

Location: Remote
Client: Alteryx (Denver, CO)
Dates: 2019-2022

- Resolved customer and in-house defects in the software's main back-end C++ engine, using C++ 11 on both Windows and Linux platforms.
- Developed new features for the software's main back-end C++ engine, using C++ 11 on both Windows and Linux platforms as part of a team of developers.
- Fixed some of the most long-standing and challenging defects in the software; thoroughly documented the root causes and implemented testing to prevent recurrence.
- Managed the defect lifecycle, interfacing with other teams for information and assistance when needed.

TECH STACK

C++, C#, Boost, GNU, SQL Server, Visual Studio, Windows, Linux

SKILLS

Scrum, Agile, TDD, Modern C++, Debugging, Defect Lifecycle Management

INDUSTRIES

Data Science

SKUNK CAPITAL: CRYPTO TRADING BOT

Location: Remote

Client: Skunk Capital (Perth, AU)

Dates: 2017-2019

Tech: NodeJS, AWS EC2, DynamoDB, MongoDB,
AWS Lambda, MySQL, AWS S3, ReactJS

- Developed a full and profitable algorithmic trading system to exploit arbitrage opportunities between cryptocurrency futures and spot markets.
- Tested and debugged the system, using APIs for various exchanges.
- Developed plugins to allow the system to be used on various popular crypto futures and spot exchanges.
- Rigorously tested.

TECH STACK

AWS, DynamoDB, NodeJS/Typescript

SKILLS

Architecture, Integrating APIs, Trading, Crypto, Arbitrage

INDUSTRIES

Blockchain, Crypto, Automated Trading, TDD

JABERMED: EVS IoT SYSTEM

Location: Remote

Client: Jaber Med (US)

Dates: 2018-2019

Tech: Embedded C/C++, Open RTOS, Arduino,
ESP8266/32, AWS Lambda, AWS EC2,
AWS DynamoDB, AWS S3

Developed system for use in emergency rooms. A distributed network of ESP8266-based units communicates with a server via a centrally located local ESP32 unit, via Wifi, providing data on the state and condition of the room.

MOBILE IRRIGATION CONTROL APP

Location: Remote

Client: Aquamonix (Australia)

Dates: 2016-2019

Tech: Embedded C/C++, Open RTOS, Arduino, ESP8266, AWS IoT, AWS Lambda, Alexa Skills

Developed/maintained an IOS application which allows customers to interact remotely (via mobile) with their industrial-sized SCADA systems.

ALEXA SKILL

Location: Remote

Client: Sterling VC (New York, NY)

Dates: 2017-2019

Tech: NodeJS, AWS Lambda, AWS Alexa Skills, AWS S3, DynamoDB

Developed/maintained the SNY (Sports New York) skill, which retrieves and serves media on command regarding New York sports teams, via Alexa.

IoT R&D

Location: Remote

Client: Futronix USA

Dates: 2017-2018

Tech: Embedded C/C++, Open RTOS, Arduino, ESP8266, AWS IoT, AWS Lambda, Alexa Skills

Provided R&D to prove the viability of an application to allow users to control their home lighting systems via voice commands (Alexa).

FRESHDIRECT MOBILE APPS

Location: Remote

Client: FreshDirect (New York, NY)

Dates: 2014-2016

Tech: Xamarin IOS, Xamarin Android, Native IOS, Native Android, Objective C, Java

Developed webby-winning IOS app for online grocery FreshDirect, as well as support & development for their Android and other IOS apps.

PAST EXPERIENCE

MANAO SOFTWARE

Team Technical Lead, 2012-2014

Chiang Mai, TH

HOTELTRAVEL

Software Development Manager, 2009-2012
Phuket, TH

MORGAN STANLEY

Senior .NET Developer, 2007-2009
New York, NY

LINKS

<https://www.linkedin.com/in/john-kosinski-7071225/>
<https://github.com/jrkosinski>
<https://www.toptal.com/resume/john-r-kosinski>

ARTICLES

<https://medium.com/@john.kosinski>
<https://www.toptal.com/arduino/esp8266-arduino-tutorial-alexa-hack>
<https://www.toptal.com/ethereum/ethereum-oracle-contracts-tutorial-pt1>
<https://www.toptal.com/ethereum/ethereum-solidity-oracle-contracts-pt2>
<https://www.toptal.com/ethereum/oracle-contracts-tutorial-pt3>

EDUCATION

University of Delaware
BS Computer Science

MILITARY SERVICE

US Marine Corps

US CITIZEN

REFERENCES AVAILABLE UPON REQUEST