AKI GAO

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Profile

I am a JavaScript developer with a passion for technology and innovation, in particular the Web and Blockchain. I offer three years of experience in full stack web application development from conception through delivery of elegant and maintainable solutions. My expertise ranges from designing and implementing responsive and user-friendly web-based UX/UIs to architecting and developing modular, scalable and fault-tolerant back end infrastructures. Specifically, I specialize in web application development using the React and Node.js ecosystems. My personal mission is to use technology and entreprenership to create a more compassionate and humancentric future by empowering people to connect more meaningfully and reducing social and economic inequality.

Education

The University of Virginia: School of Engineering and Applied Science (SEAS)   August 2016
- Computer Engineering & Electrical Engineering

Skills

Languages:
- JavaScript, TypeScript, Shell (Bash)

Development and Testing Tools:
- Agile (Scrum/Kanban), Git, NPM, Yarn, Webpack, Babel, Mocha, Chai, Sinon

UX/UI and Front End Technologies and Tools:
- Sketch, HTML, CSS, React, Redux, Redux-Saga/Thunk, React/Reach Router, CSS Modules, PostCSS, Storybook

Back End and Database Technologies:
- Node.js, Express, Helmet, GraphQL, Apollo, MongoDB, MySQL

Blockchain Technologies:
- Ethereum, Solidity, Web3.js, Ethers.js, Truffle, Ganache, Metamask, Remix, Geth, Infura

Infrastructure and DevOps Technologies:
- Apache, Nginx, Docker, Jenkins, Travis, Terraform, Packer, AWS, Azure, Google Cloud

Work Experience

Blockchain Web Application Development Consultant - Freelance/Contracting   February 2018 - Present
- Provides services to clients to architect and develop front end and back end applications for Blockchain-based platforms.
- Also provides consultations to determine viability of Blockchain use cases and conceptualization of decentralized business models based on tokenization and distributed ledgers.
- Specializes in rapid prototyping of performant and user-friendly front end applications to interface with Blockchain back ends, as well as hybrid back end solutions that utilize both traditional database systems and Blockchain.
- Developed solutions and provided technical capabilities for early stage Blockchain start ups across a wide range of industries including Food Supply Chain, Healthcare and Video Game Asset Management.

Alluminate - Javascript & Blockchain Developer   October 2017 - February 2018
- Provide high-level technology expertise and development capabilities for in-house and consulting work ranging from UX/UI to smart contract development.
- Designed, developed and maintained the company's homepage as well as the landing page for several products.
- Core development member of the CryptoPets platform, an Ethereum-based game platform for collecting and battling digital pets developed in partnership with Arcade Distillery.
- Aided in smart contract design, as well as audited smart contracts for correctness.
- Developed in-house development and testing environment using Web3, Docker and Geth.

Booz Allen Hamilton - Technologist   May 2017 - November 2017
- U.S. Treasury Proof of Concept Blockchain Application - July 2017 - August 2017
  - Developed a proof of concept Blockchain application for the U.S. Treasury to replace existing payment infrastructure between Government organizations.
  - Application built with a Javascript stack (React/Redux and Node.js) and deployed to Azure Cloud.
  - Smart contracts written in Solidity with Truffle and deployed to Microsoft's Blockchain network.
  - Led development efforts across the stack, and architected the front end, back end and deployment pipeline, as well as the cloud infrastructure for the project in a small team of developers in an Agile environment using Kanban.
  - Acted as defacto Product Owner and Scrum Master to translate requirements from the stakeholder, and to convert requirements into tasks to be distributed among team members.
  - Participation, expertise and leadership in project led to conversion of project from a Proof of Concept work into a full-fledged proposal for a contract bid.
- FDA Health Blockchain Platform Investment - September 2017 - November 2017
  - Architected and bootstrapped the front end for the FDA Health Blockchain Platform Investment Project.
  - Front end logic built with React stack and user interface styled using CSS modules and PostCSS.
  - Led front end development efforts, including designing the UX/UI, implementing application logic, and providing high level guidance to other developers.