

---

# AKI GAO

---

xiaoyu.akihiro.gao@gmail.com | [iknowhtml.github.io](https://iknowhtml.github.io) | [github.com/iknowhtml](https://github.com/iknowhtml)

---

## Profile

---

I am a JavaScript Engineer with a passion for technology and innovation, in particular Blockchain and the Web. My personal mission is to use technology to create a more compassionate and humancentric future that focuses on the collective good of society. My experience and 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, as well writing secure and composable smart contracts on Blockchain systems. In particular, I specialize in full stack application development using the React and Node.js ecosystems.

---

## Education

---

The University of Virginia: School of Engineering and Applied Science (SEAS)

August 2016

- Computer Engineering & Electrical Engineering
  - Rodman Scholar (Honors Program for Top 5% of Engineers)
- 

## Skills

---

### Languages:

- JavaScript (ES5/ES6/ES7/ES8), Solidity, Shell (Bash)

### UX/UI and Front End Technologies and Tools:

- Sketch, HTML5, CSS3, JQuery, React, Redux, Redux-Saga, CSS Modules, PostCSS

### Blockchain Technologies:

- Web3, Truffle, Ganache, Remix, Geth

### Development and Testing Tools:

- Agile (Scrum/Kanban), Git, Webpack, Babel, NPM, Yarn, Mocha, Chai, Sinon, Enzyme

### Back End and Database Technologies:

- Node.js, Express, Mongoose, Helmet, MongoDB, MySQL

### Infrastructure and Infrastructure Technologies:

- Apache, Nginx, Docker, Jenkins, Travis, Terraform, Packer, AWS, Azure
- 

## Work Experience

---

Freelance - Javascript & Solidity Developer/Consultant

February 2018 - Present

- Provide services to clients to architect and develop front end and back end applications, as well as smart contracts.
- Also offer work to clients seeking development capabilities for planned or existing projects.
- Special focus in JavaScript-based stack including the React and Node.js ecosystem for the front end and back end respectively, as well as Solidity for smart contract development.

Alluminate - Full Stack Javascript & Solidity 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 several websites, including the Alluminate homepage and the CryptoPets landing page.
- Core development member of the CryptoPets platform.
- CryptoPets is an Ethereum-based game platform for collecting, and battling digital pets developed in partnership with Arcade Distillery.
- Smart contracts written in Solidity implement ERC721 to tokenize pet ownership.
- 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.
  - 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.
  - Architected the front end, back end and deployment pipeline, as well as the cloud infrastructure for the project.
  - Led development efforts across the stack, including the UX/UI design, front end, back end and devops, 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.
- 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, Redux, React Router, Redux Form, and user interface styled with custom CSS4 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.