

ERIC SOLOMON

FULLSTACK ENGINEER & TECHNOLOGY GENERALIST

EXPERIENCES

- 2020
Fullstack Engineer
Upstack 📍 (remote)
 - Work dynamically and autonomously with independent clients to create fullstack applications in NodeJS, ReactJS, and Go
 - Maintain ownership of and accountability for continuous integration pipeline
- 2019
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2018
Fullstack Engineer
Boid: Social Supercomputer 📍 (remote)
 - Design, implement, and manage blockchain-based system to run a medium-scale distributed computing cluster
 - Participate in startup funding proposal and business outreach processes
- 2018
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2016
Graduate Research Assistant
Alfred Gessow Rotorcraft Center 📍 College Park, Maryland
 - Create state-of-art, resource-constrained aerial robotics systems, including computer vision, controls, and artificial intelligence
 - Manage engineering pipeline for undergraduate, graduate, and third-party collaborators including the U.S. military
 - Publish papers, write contract proposals, and speak at technical conferences

SELECTED PROJECTS

- 2020
GatsbyJS
GatsbyJS
 - Contribute to the GatsbyJS static-site generator
 - Document & demonstrate asynchronous plugin usage
 - Update to image components to maintain HTML validation
- 2020
Linkerd
Linkerd
 - Contribute to the Linkerd service mesh
 - Incorporate RSA-based PKI certifications
 - Validate compatibility of Kubernetes service accounts
- 2020
Personal projects
Personal
 - Create serverless and microservice-based projects with modern techniques using ReactJS, Typescript, NodeJS, Go, Python, and containers
 - Fractalooze: Compress images up to 15x compression rate using fractals. Integrate with JAMstack-based display and API.
 - Graphtools: Create a general purpose graph for visualizing and testing algorithms using Go, websockets, and ReactJS
 - AAAB: Create a serverless webapp for dataset source validation to experiment with quantum computing using IBM Qiskit, Python, and ReactJS
- 2019
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2018
BOID-EOS
Boid
 - Manage the effectiveness of BOID teams, which sell personal computing power and compete for prizes using EOSIO and World Community Grid platforms for secure, distributed, redundant cluster computing
 - Create API endpoints based on the EOSIO public blockchain and Boid-run, customer-facing NodeJS servers
- 2018
Metaltail Hybrid VTOL Vehicle
Alfred Gessow Rotorcraft Center
 - Design and analyze avionics and controls systems for a hybrid hover & forward-flight vehicle for use in urban environments
 - Collaborate with a team of aerospace engineers to analyze budget, weight, and technology-readiness of the entire vehicle

SOCIAL INFO

🌐 errcsool.com
📄 github.com/han-so1omon
📄 stackoverflow.com/users/3271700/errolflynn
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🌐 [linkedin.com/in/eric-solomon-35a22490](https://www.linkedin.com/in/eric-solomon-35a22490)

SKILLS

Web design
Serverless
Microservices
Javascript & Typescript
Go
NodeJS & ReactJS
HTML5 & CSS3
SQL & NoSQL
GraphQL & REST

Container orchestration
Docker & Kubernetes
Service mesh (incl Linkerd)
Blockchain (incl EOSIO)

Data science
Machine learning & AI
Vehicle control
Computer vision
Python
C++
Tensorflow

Git
CI/CD
Linux
Bash



EDUCATION

- 2018
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2016
- M.Sc. in Aerospace Engineering**
University of Maryland 📍 College Park, Maryland
- Focus in aerial robotics
 - GPA: 3.47
- 2016
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2012
- B.Sc. in Aerospace Engineering**
University of Maryland 📍 College Park, Maryland
- Minor in Computer Science
 - GPA: 3.40



PUBLICATIONS

- 2019
- "Reinforcement Learning Control for Quadrotors using Snapdragon Flight". E. Solomon, A. Shastry, V. Hrishikeshevan, I. Chopra. 8th Biennial Technical Meeting on VTOL Unmanned Aircraft Systems and Autonomy. Mesa, AZ. Jan 2019
- 2018
- "Autonomous Quadrotor Control and Navigation with Snapdragon Flight". E. Solomon, V. Hrishikeshevan, I. Chopra. 74th American Helicopter Society International Forum. Phoenix, AZ. May 2018
- 2017
- "Visual Odometry Onboard a Micro Air Vehicle Using Snapdragon Flight". E. Solomon, C. Vorwald, V. Hrishikeshevan, I. Chopra. 7th American Helicopter Society Technical Meeting on VTOL Unmanned Aircraft Systems and Autonomy. Mesa, AZ. Jan 2017.



AWARDS

- 2018
- 2018 American Helicopter Society Graduate Design Prize