

Aaron Herres

A full-stack, team-building software developer with an interest in software architecture, research and development, and coding philosophy.

SUMMARY

A software developer with over 20 years experience. A generalist, Aaron has worked in a variety of work environments ranging from startups to large corporations. Aaron's passion for generalism and minimalist design has allowed him to work on projects ranging from microcontrollers to the development of on-premise large cloud computing clusters. Aaron also loves leading teams, as it gives him a captive audience to discuss software development philosophy and exercise his strategies for delivering low-defect software quickly.

EXPERIENCE

Loqwai November, 2021 - Present ⌚ 1 year, 3 months

Software Consultant

Currently working as a self-employed software consultant on a few projects for clients, including product design consulting for startups, microcontroller development and architecture for an open-source IoT farming project, and software development and docker infrastructure for a decentralized storage project.

Magic Leap March, 2019 - April, 2021 ⌚ 2 years, 1 month

Team Lead

Acted as a lead developer for the backend of a collaborative augmented reality cloud platform. Helped form the culture of the team, as well as develop and design the product. Instilled an effective, collaborative team culture featuring test-driven Unix philosophy with an agile development cycle. Stitched together the real and virtual worlds via the magic of augmented reality goggles. Focused on making augmented reality less lonely by enabling shared experiences - persistent augmented reality worlds multiple users could see and interact with.

Citrix December, 2014 - November, 2017 ⌚ 2 years, 11 months

Staff Software Engineer

Full stack design and development of the Octoblu Designer, a flow-based visual editor that connects of hundreds of different devices and services to each other without code. Flows run in the cloud, allowing execution of arbitrary flows created by users securely and efficiently due to our massively parallelizable architecture. Design of the domain-specific language used by the Octoblu Designer. The designer ran on top of Meshblu, the open source IoT platform described below.

Octoblu March, 2014 - December, 2014 ⌚ 9 months

Software Consultant

Full stack development of Meshblu, an internet of things platform, and development work on practical solutions based on that platform. Meshblu can connect hundreds different of services, internet of things

devices, and hobby projects to each by translating them to a common messaging system. This system was acquired by Citrix, who then developed the commercial frontend "Octoblu" mentioned in the Citrix section. The public instance of the Meshblu platform processed over 4 million messages per hour.

Unicon, Inc. August, 2013 - May, 2014 ⌚ 9 months

Software Developer

Developed and consulted for an open source education portal. Worked on the security on the platform, as well as front and backend work with Java/Spring.

Omedix September, 2010 - April, 2013 ⌚ 2 years, 8 months

Software Architect

Helped design the Omedix Engage platform, which managed patient and practice portals for the healthcare industry. Wrote systems that handled sensitive healthcare data securely. Designed the "Black Box", a physical network appliance installed in the datacenter of a medical practice that securely connected their electronic medical system to the Omedix Engage platform. Designed 2 domain-specific languages to build custom patient forms for medical practices. Acted as a liaison for Omedix Team India, offering tutorials and designs to teams on the other side of the world.

University of Hawaii Manoa January, 2009 - August, 2010 ⌚ 1 year, 7 months

Software Developer

Designed and developed an intelligent, plugin-based web crawler that used existing algorithms from social sciences to extract semantic meaning from natural language conversations on the web. Informally described as "finding terrorists on the internet", the system would trace the origin and spread of extremist ideas. Funded by the Air Force Office of Scientific Research.

Laboratory for Interactive Learning Technologies August, 2008 - January, 2009 ⌚ 5 months

Research Assistant

Performed research and development on augmented reality for mobile platforms. Designed an application to recognize nametags of users and augmented nametags with information of the wearer of the nametag.

Avanade August, 2007 - August, 2008 ⌚ 1 year

Solution Developer

Contract developer for Microsoft, working on disaster recovery and EULA-generation projects in C# and ASP.NET

University of Puget Sound August, 2003 - May, 2007 ⌚ 3 years, 9 months

Software Developer

Developed a system responsible for managing internet connections for thousands of students. The system automatically scans each connected computer for vulnerabilities, moving vulnerable devices to a network that limited access to only security updating sites until the device is no longer vulnerable.

Interfaced with smart routers through SNMP.

Software Development Alternatives December, 2001 - January, 2003 ⌚ 1 year, 1 month

[Software Developer](#)

Tested and fixed bugs for the Flight Management System of Airbus A320 aircraft, including some feature development. Subcontracted from Honeywell.

SKILLS

Typescript

Augmented Reality (AR)

Go (Programming Language)

Microservices

Team Leadership

Software Design

And others...

EDUCATION

Computer Science Master of Science August, 2008 - May, 2010 ⌚ 1 year, 9 months

[University of Hawaii at Manoa](#)

Computer Science Bachelor of Science August, 2003 - May, 2007 ⌚ 3 years, 9 months

[University of Puget Sound](#)