

Jake Van Alstyne

Salt Lake City, Utah | 801.793.9798 | j@jva.lol | jva.lol | github.com/jvalol | linkedin.com/in/jvalol

Summary

Senior software engineer focused on backend systems, data pipelines, and product integrations. Experienced across Elixir/Phoenix, Go, Ruby/Rails, React, Swift, Objective-C, C, and C++, with a background that spans web platforms, iOS/macOS applications, graphics tooling, and research software.

Core Skills

Backend Elixir, Phoenix, LiveView, Go, Ruby, Rails, REST APIs, background jobs, distributed workflows

Data and Infrastructure PostgreSQL, MongoDB, RabbitMQ, AWS SQS, AWS S3, Docker, Kubernetes, GKE

Product Engineering React, Swift, Objective-C, C, C++, OpenGL, GLSL, Core Data, App Store delivery

Experience

Senior Backend Engineer

Sep 2022–Present

Remote

Interfolio

- Build and maintain publication data pipelines that collect, curate, and prepare scholarly works for product recommendations.
- Develop backend services in Elixir and Go, integrating PostgreSQL, MongoDB, AWS SQS, AWS S3, and Docker-based workflows.
- Work across sourcing, normalization, and recommendation-supporting systems for academic publication data.

Senior Engineer

Sep 2017–Sep 2022

Salt Lake City, Utah

Mavenlink

- Built customizable data-pipeline and integrations platform features for a professional services web application.
- Developed Elixir, Phoenix, LiveView, Ecto, RabbitMQ, Ruby on Rails, and React systems for syncing customer data with external APIs including Jira and QuickBooks.
- Contributed to Kubernetes and Docker infrastructure supporting application and integration workloads.

Senior iOS Developer

Oct 2015–Sep 2017

Sandy, Utah

Munkee Apps LLC

- Delivered feature enhancements, bug fixes, and ongoing product improvements for existing iOS applications.
- Worked primarily in Objective-C and Swift across production mobile codebases.

Senior iOS Developer

May 2014–Sep 2015

Remote

Selfie Inc.

- Developed and maintained core iOS app features for a social networking product focused on face-to-face conversations.
- Shipped feature enhancements and bug fixes in Objective-C.

iOS Consultant

Sep 2013–Aug 2015

Remote

NTT Data

- Maintained client iOS applications, including feature work, bug fixes, repository management, and App Store release support.

iOS Consultant

Feb 2014–Jun 2014

West Valley, Utah

USANA

- Improved enterprise reporting modules in an internal iOS application, including a custom tree-based reporting view.

iOS Developer

May 2012–Sep 2013

Stem Innovation

Salt Lake City, Utah

- Built IZON iOS app architecture with Objective-C application code and C/C++ core modules.
- Implemented asynchronous RESTful service interaction, local and remote viewing, and live multi-source data streams.

Graphics Engineer

Apr 2012–Dec 2012

K'nowbe Works, LLC

West Valley, Utah

- Developed C++ engineering design tools using Windows API, MFC, COM, OpenGL, OSG, and GLSL.
- Improved the core graphics engine, built rapid geodata contouring tools, and contributed to pipe-layout design software.

Graphics Engineer

Nov 2011–Mar 2012

FlexSim Simulation Products

Orem, Utah

- Maintained and upgraded C++ simulation software, improving GUI behavior and core application functionality.
- Created performance and unit tests for the product codebase.

Earlier Experience

Web Developer, Software Development Center, University of Utah

Jun 2010–Sep 2010

iOS Developer, OpCode LLC

May 2008–Aug 2008

Independent and Freelance iOS/macOS/Web Developer

May 2008–2015

Research Assistant, University of Stuttgart

Aug 2007–Jan 2008

Undergraduate Research Assistant, University of Utah

Oct 2006–Dec 2008

Selected Projects

Interfolio Scholarly Work Recommendations

2022–Present

- Elixir and Go products for sourcing scholarly works and generating recommendations for scholars.

Mavenlink Integrations Platform

2017–2022

- Elixir/Phoenix/RabbitMQ platform for syncing professional-services data between Mavenlink and external systems.

Selected iOS and macOS Applications

2011–2017

- InstaSize photo editing and resizing app; Selfie social app; OurPlan iPad construction scheduling; Lacrosse Stats; OnCue motion detection and remote video streaming.

Education

M.Sc., Computing

2013

University of Utah

Graphics and Visualization

- Improvements to rational surface analysis in toroidal magnetic confinement fields

B.Sc., Chemical Engineering

2008

University of Utah

- High Temperature Fixed Bed Mercury Sequestration on a Non-Carbonaceous Substrate