TYLER A. YOUNG

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Work Experience

SOFTWARE TEAM LEAD
Generac Grid Services

June 2021 – Present
Remote

- Led a scrum team delivering features & fixes to large energy utility customers
- Worked with our product, QA, and infrastructure teams to define acceptance criteria & testing requirements
- Delivered features for our Elixir back-end, making use of BEAM/OTP platform features like process isolation, supervision trees, error recovery, & more
- Contributed to our Elm-based web front-end, communicating with the back-end via GraphQL
- Overhauled CI setup for better developer feedback and a 30% reduction in test times
- Improved scalability & performance through both BEAM and Postgres optimizations

LEAD APPLICATION DEVELOPER
Unbound Photo Browser for Mac

June 2020 – August 2021
Self-Employed

- Rescued the app after years of neglect by the previous developer, fixing dozens of crashing bugs & delivering much-requested new features, leading to a 50% increase in the Mac App Store's average rating in 6 months
- Began transitioning the legacy Objective-C & AppKit codebase to Swift (and SwiftUI, where appropriate)
- Overhauled marketing to improve user perception & better explain unique selling proposition

SENIOR SOFTWARE ENGINEER
Laminar Research

May 2014 – February 2021
Remote

- Designed & implemented both the C++ client & Elixir server for X-Plane's massive multiplayer network, capable of supporting 10,000+ simultaneous players in a single shared world (Elixir-Lang.org case study)
- Reimagined the user experience for the X-Plane 11 release: in addition to a sleek new look, I overhauled the UI to be heavily visual and entirely interactive, where before it was static, text-based, and unintuitive
- Created an automated testing suite for X-Plane Desktop, and deployed a continuous integration cluster to improve code quality and prevent both functionality and performance regression bugs
- Developed GIS algorithms for building global scenery for X-Plane Mobile

WEB DEVELOPMENT CONSULTANT
Conversion Insights, Inc.

January 2013 – April 2014
Self-Employed

- Improved clients' online marketing, attracting more high-quality leads & converting more leads into customers
- Designed, developed, and maintained web sites based on WordPress & PHP

Open Source

- Contributed Enum.slide/3 for the Elixir 1.13 standard library
- Open-sourced Elixir implementation of the RakNet protocol for reliable UDP networking
- Fixed a memory leak in the Bloom filter used in DuckDuckGo's iOS app

Writing & Presentations

- Presented Designing GenServers for Testability at ElixirConf 2021
- Wrote about why I chose Elixir for the X-Plane massive multiplayer server
- Wrote Benchmarks of Cache-Friendly Data Structures in C++

Education

TRUMAN STATE UNIVERSITY
Bachelor of Science, Computer Science
Minor in Mathematics

Graduation Date: May 2013
Cumulative GPA: 3.9