Benjamin F. Wilson

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Skills

- Building and maintaining websites, servers, mobile apps and full-stack applications
- Designing, developing, deploying and maintaining programming languages (Parsers, Typecheckers, Runtimes, Compilers)
- Using C/C++ with OpenGL for data visualization
- Proficient with: Haskell, Javascript, HTML5, CSS, C++, C, RegEx, NGINX
- Familiar with: GLSL, PHP, Bash, SQL, Java, Obj-C, Python, Lua, C#, x86 assembly
- Leadership experience running an LLC, clubs, and organizing teams for software development projects
- Teaching programming languages and general CS concepts & techniques
- Comfortable with Git, Github, Vim, Atom, Xcode, Unity

Education

M.S., Oregon State University (OSU), Corvallis OR   2021

- Major: Computer Science
  - Thesis: Structuring Teachable Knowledge through Program-Concept Classifications
- Studied Programming Language Theory, Computer Graphics, and AI
- Selected speaker at first MS Virtual Visit for prospective graduate students coming to OSU

B.S., Oregon State University, Corvallis OR   2020

- Major: Computer Science (Computer Systems Option)
- Accelerated Masters Platform (AMP) Candidate, studied graduate level Computer Graphics and AI

Experience

Research Assistant, Programming Languages Research Group, OSU, Corvallis OR   2020 - 2021

- Designed technique for generating and analyzing program-concept classifications via Formal Concept Analysis
- Co-wrote and maintained the programming language BoGL, written in Haskell, for use by middle school students
- Led development on research group showcase website, BoGL documentation/tutorials, and embeddable BoGL interpreters

Undergraduate Learning Assistant, Oregon State University, Corvallis OR   Sept. 2018 - June 2020

- Undergraduate Learning Assistant (TA), worked with students in introductory Computer Science 160/162 courses
- Ran labs and taught students about programming language concepts through C++ and Haskell

Head Software Engineer, Axolsoft, Upland CA   Jan. 2015 - Sept. 2017

- Co-founded Axolsoft, a full-stack and mobile software LLC
- Developed customer & administration portals for services and payments with PHP, SQL and the Braintree payments API
- Maintained DL 360 & DL 380 Proliant servers running Ubuntu as part of Axolsoft infrastructure
- Built axolsoft email system in PHP for sending emails with DKIM signatures, and setup SPF and DMARC for domains
- Created a MySQL database abstraction stack (server and sdk), used internally by all Axolsoft systems

Contract/Independent Software Engineering Work   2013 - 2015

- Developed web management tools under contract for Score Savers SAT Prep with Parse server and Javascript
- Co-developed a popular Android app in Java, 'Corvallis Transit', for predicting when buses will arrive in Corvallis, OR
- Built Android/iOS student testing app for Score Savers with SQLite/CoreData, and MySQL/PHP for server-side app