

Chris Geihlsler

4933 Hatfield St • Pittsburgh PA 15201 • 404-271-1164 • chris@geihlsler.net • @seejee

Experience

Think Through Learning (TTL)

Senior Software Engineer/Generalist/Engineering Manager

Pittsburgh, PA

January 2013 - Present

Key contributor for TTL's flagship product, Think Through Math (TTM): an online, web-based, remedial math tutoring application focusing on students in grades 3-8. TTL was acquired by Imagine Learning in October 2016.

- Designed, developed, tested, and deployed user-facing features in Ruby on Rails, JavaScript, and Elm.
- Helped scale TTM to support 3,000,000 students completing over a billion math problems per school year. At peak load, TTM processes 45,000 requests per minute with an average response time of 65ms.
- Designed and implemented a reporting service that manages billions of rows and processes report requests from teachers, school administrators, and TTL employees.
- Developed a responsive, mobile-friendly "lesson player" SPA in Backbone/Marionette that presents TTM's math problems, help content, and instructional videos to its students.
- Developed a Node.js/Angular chat application that enables students to receive math instruction from and communicate with teachers in real-time.
- Utilized a simple branching strategy, feature flags, and an "automate everything" attitude to easily, reliably, and continuously deploy our applications to the cloud.
- Aggressively refactored the system to improve maintainability and reduce complexity.
- Acted as functional manager for three software engineers. Responsible for providing actionable feedback, conducting performance reviews, setting career goals, and managing the engineering hiring process.

Omnyx

Senior Software Engineer

Pittsburgh, PA

November 2008 - January 2013

Developed Omnyx's Integrated Digital Pathology (IDP) system: an enterprise application that allows anatomic pathologists to accurately and quickly diagnose patients by replacing a workflow of glass slides, microscopes, and paper records with digital images, electronic records, and integration to other systems within the hospital.

- Designed, developed, and tested user-facing features using C#, WPF, WCF, NHibernate, and SQL Server.
- Built control software for a high precision medical imaging device in C# and C++. Utilized messaging patterns to coordinate the movements of a high-speed robot with extremely sensitive optics.
- Optimized SQL queries and application logic to support millions of patient cases.

CareCentric

Software Engineer/Technical Team Lead

Atlanta, GA/Pittsburgh, PA

May 2003 – November 2008

Developed and maintained Ac-Cura: a smart client home healthcare management software product that allowed customers to intake patients, collect clinical data, and generate healthcare claims.

- Designed and implemented a layered architecture using C#, WinForms, IIS, and SQL Server.

Community

- Presented "Make the Big Change ... One Small Change at a Time" at Abstractions 2016.
- Presented "Elixir vs. Node: Callback-free Concurrency" at CodeMash 2015 and Code and Supply.
- Organizer for Steel City Ruby Conference and regular attendee of the Pittsburgh Ruby meetup.
- Attended Udi Dahan's *Advanced Distributed Systems Design with SOA* in Austin, TX.

Tools/APIs

OSS: Ruby 1.9-2.2, Rails 3.x-5.x, Node.js, Backbone, Angular, Elm, Postgres, Redis, Elixir, Heroku, AWS, git, vim

MS: .NET Framework 1.1-4.0, WPF, WCF, NHibernate, NServiceBus, MSSQL Server 2000-2008

Education

Georgia Institute of Technology (Georgia Tech)

B.S. in Computer Science, GPA: 3.25 (Honors)

Specializations in Graphics and Networking

Atlanta, GA

1998 - 2003

HOPE Scholar, National Merit Scholar, Member of National Society of Collegiate Scholars