Steve Geluso

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 $u = (m, f, n = 0) = > \{for(; n < m;) f(n + +); for(; n;) f(n - -)\}; p = (f = ' ') = > u(10 - 1, j = > \{u(j, i = > f + = i); f + = '0 \setminus n' \}) | | f + "0"; p(j, i = > f + i); f + i = (i + i);$

Personal Summary

I'm a programmer living in Seattle working as an engineer on a Siri team at Apple. We support anything to do with Siri and movies and TV shows. After working on Siri for a year a half I'm looking to transfer internally to Front-End Web Engineer - Instructional Products to better align my skills and interests.

I started my career working at Google, then left to free-lance on my own, then joined a web dev consultancy, then spent four years working as an instructor at "boot camp" programming trade schools teaching adults. It was a joy sharing my passion for programming and quickly getting people up to speed to land entry-level jobs. There's magic in education.

My proudest professional work is a website <u>AWOL in P-Town</u>, an interactive giga-pixel hidden image game promoting a feature film. I built this from scratch designing the entire tiling pan and zoom system. I love the expressiveness of front-end web development and I love the challenges a good design and implementation bring.

In my spare time I'm actively writing a book called <u>Learn Programming Programming Board Games</u>. I love writing, producing published content, and the act of introspection, refinement, and transcription involved in explaining what's going on when you program various board games.

Between my expertise in front-end web development and my experiences writing my book I think I'm a good fit for this role joining Instructional Products. I'm looking forward to helping maintain and create useful tools.

Education & Skills

Bachelor of Computer Science at the University of Washington

Sep 2007 - June 2012

- Data Structures, Algorithms, Networks, Programming Languages, Distributed Systems, Databases.
- Served as ACM Club Treasurer, managed department funds, managed profitable student snack store.
- 4th place ACM team programming contest, three-time Yahoo! Hack U team hackathon participant.
- Received Community Service Award for continually helping to organize, run and clean up department events.

Programming Languages: JavaScript, Python, Java, C#, PHP, Ruby, Julia, Rust, Bash

Technologies: vim, git, React, Node, Android, Django, Rails, Angular, PostGres, MySQL

Professional Experience

Apple, Seattle / Remote

2020 - Present

AI/ML Sr. Software Engineer, Movies & TV

- · Developed and maintained features on iOS, tvOS, Mac and Homepod using Swift and Golang.
- Developed new features working with multiple teams and against deadlines.
- Triaged new bugs and monitored production systems during on-call rotations.

Google, Seattle / London / San Francisco

2010 - 2013

Software Engineering for Webmaster Tools, Android Search, Knowledge Graph teams.

- Webmaster Tools: created multiple inboxes, starred messages, visualizing Site Alerts.
- Android Search: prototyped rich native search experiences for new Android tablet OS.
- Knowledge Graph: massive distributed "human computation" data collection and verification.

Moby: Expert Web and Mobile Development, Seattle

2014 - 2015

Software Engineer

- Used Angular, Bootstrap, Kendo and C# to build richly interactive web sites for clients.
- Prototyped experimental video web app using Ruby on Rails, and YouTube and Vimeo APIs.
- Implemented UX designs. Maintained automated tests. Coordinated complicated git merges.

&yet Web Design, Richland, WA

2008 - 2009 & 2015

Web Developer, Event Coordinator

Created a customizable customer contact system soon used across many different sites.

- · Coded with Django, PHP, JavaScript, CSS and HTML.
- Managed audiovisual booth during Realtime Conference.

Freelance Work

AWOL in P-Town, (Oakland / Spokane / Seattle)

2013 - 2014

Lead Programmer, Co-Creator, Co-Designer, http://awol-in-ptown.com

- Created a custom interactive panoramic picture viewer, serving tiles from a 40 GB image.
- Worked with Robyn Miller, co-creator of the once best-selling video game Myst.
- Coordinated development with a team split across three cities.
- Technologically diverse: Angular, social media APIs, MySQL, Photoshop automation.

The Immortal Augustus Gladstone (Oakland / Spokane)

2013

- Web Developer, http://theimmortalaugustusgladstone.com
- Rich multimedia website, with movies, sound and pictures, built under deadline pressure.
- Dynamically loads YouTube videos using YouTube's JavaScript API.
- Integration with social media, Mailchimp, VHX, Vimeo, and Gumroad.

Teaching Experience

Learn Programming Programming Board Games (.com)

- A book about programming. Focused on creating board games ranging from simple to complex.
- · Content covers intro and advanced computer science topics, and practical programming advice.
- Emphasis on conveying ideas preferring written word over written code.
- Topics include: control flow, functions, classes, data structures, programming patterns.
- Games include: Rock-Paper-Scissors, War, Blackjack, Poker, Cribbage, Tic-Tac-Toe, Connect Four, Checkers, Chess, Go, Risk, Catan, Dominion,

Flatiron School, Seattle

Lead Instructor

- Simultaneously led up to three full-time classes of students in lectures and labs.
- Founded AutoCompete, a monthly team-based programming contest open to the public.
- Organized efforts around teaching more data structures and algorithms.
- Built lecture material including starter-code and Markdown slides.
- · Advised students on portfolio projects and provided emotional support during the program.

Code Fellows, Seattle

Lead Instructor (Java, Android, JavaScript/Node/React)

- Authored an entire 10 week advanced Java course w/ SpringMVC and Java collections data structures.
- · Authored an advanced apprenticeship course w/ concurrency, backtracking, CPU architecture.
- Conducted practice whiteboard interviews and provided helpful professional feedback for students.
- · Helped bolster new and improving data structures and algorithms curriculum.
- Participated in panel Q&A discussions about different programming languages for incoming students.

General Assembly, Seattle / Singapore

Lead Instructor (Web Development, Android, Data Structures & Algorithms)

- · Led 12 week immersive courses doing morning/afternoon lectures, labs, and grading assignments.
- Coordinated entire 12 week course schedules with co-instructors, TAs and staff.
- Helped prepare students for interviews by conducting 1:1 whiteboarding sessions.
- Bolstered curriculum with new lecture material and many new practical assignments.
- · Added missing fundamental Computer Science topics like Recursion; improved sorting exercises.
- Created 4 weeks of course content entirely replacing Ruby with Python.
- Earned an NPS score of 80 for the course containing my new Python material.

Computer Science and Engineering Department,

University of Washington, Seattle, WA

Lead Teaching Assistant, Computer Programming I & II

- Prepared lectures, led bi-weekly classroom discussions, provided homework feedback.
- Led exploratory Python lectures paralleling topics from the regular Java-based course.
- Tutored students one-on-one in a programming lab.

Personal Projects

Advent of Code 2017, 2018, 2019, 2020, 2021

- Participant in the annual Advent of Code daily programming challenge.
- Used 2017 to hone existing ability varying using Java, JavaScript, and Python.
- Used 2018 and 2019 to program in new languages: Julia and Rust
- Used 2020 and 2021 to program in new languages: Swift and Golang

Powerboats

· Real time multiplayer implementation of my favorite board game: Powerboats, a boat racing game.

- Hexagon grid, buoy-rounding detection, human and AI player control, Node, Socket.IO.
- · Live version playable at https://powerboats2020.herokuapp.com/

Pomme (a multiplayer free association image game) // http://pomme.us

- Co-programmer, an online real-time image association game, similar to Apples to Apples.
- · Adopted existing code base, helped with site redesign, currently helping to maintain the site.
- · JavaScript, custom Python server, MySQL, ongoing iPhone and Android development.

N-frame Averager // youtu.be/3VufDliutNk // github.com/geluso/n_frame_averager

A custom video effect built using Python and FFmpeg. This effect turns every frame of a movie into an average image of the N frames before and after the current frame to produce an experimental "smoothed" look.

FFmpeg Subtitle Scene Extraction // https://github.com/geluso/ffmpeg_subtitle_scene_extraction

An experiment using Python and FFmpeg to process subtitles and extract movie clips. Extracted every hallway scene from Star Trek TNG, and helped me create fun interactive video boards of favorite lines from movies.

Hobbies and Interests

Reading, Writing, Mountain Biking, Biking, Bike Polo, Board Games, Science Fiction, Moon Colonization.