Kevin Workman

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I've always had a passion for education, but I've had to "scratch that itch" outside of my software engineering career through mentorship, writing tutorials, and volunteering in my spare time. I'm looking for a job that aligns with my personal values and contains a mix of coding / building, writing curriculum content, and working directly with students and / or teachers.

Open Source / Education Experience

Google Software Product Sprint - tinyurl.com/goo-sps

February 2017 - Present

- <u>SPS</u> (formerly CodeU) is a Google outreach program designed to encourage promising undergraduate students to (re)apply to Google. Students work in groups alongside a Google advisor over 8 weeks on a technical project.
- I write SPS's <u>technical curriculum</u>, which uses project-based walkthroughs to guide students through creating a personally meaningful web app using Google Cloud libraries, with student engagement as the main goal.
- So far, 873 students and 324 mentors have worked through "my" curriculum.
- Because of COVID, Google's <u>STEP internship</u> (1,229 students and 895 Googlers) also used the SPS curriculum during summer 2020.
- As a team advisor, I've directly mentored 31 students in 9 SPS sessions.

Happy Coding — HappyCoding.io

June 2016 - Present

- I post tutorials, examples, and other nerdiness at HappyCoding.io.
- Content includes p5.js, Processing, Java (core and EE), JavaScript, HTML, Google Cloud, Android, and libGDX. (124 tutorials + 113 examples so far!)
- Used as the "textbook" for University of Chicago's CS 11111 course.
- Happy Coding's history: https://happycoding.io/blog/ten-years

Processing / p5.js - processing.org / p5js.org

August 2011 - Present

- Currently the all-time top answerer of Stack Overflow questions tagged with the <u>processing</u>, <u>p5.js</u>, and <u>processing.js</u> tags.
- Taught sessions at <u>CC Fest</u> in SF and LA including the power and beauty of random, image processing, and <u>sp00ky halloween sketches</u>.

Work Experience

Google, Mountain View California - Software Engineer

December 2016 - Present

• Google My Business lets merchants edit their info on Search and Maps.

- My team owns the core GMB info editing frontend, which is built using a mix of Java, JavaScript, and a bunch of internal frameworks.
- Led several feature launches used by millions of users, e.g. attributes, descriptions, opening dates, place actions, and temporary closures.
- Since becoming tech lead in September 2019, I've advocated for building the ownership and expertise of my peers, focusing on long-term velocity rather than short-term gain, improving our documentation, and caring more about user and operator happiness rather than shallow engagement metrics.

Get More Math, Remote - Software Engineer

January 2016 - November 2016 (Part-Time Contractor)

- Get More Math is an educational software suite that gives students individualized math problems based on where they need the most practice.
- Developed new procedural generators based on teacher requests.
- This was a mixture of Java2D, in-house UI components, and server-side generation logic supporting both Swing and JavaScript frontends.

Vencore, McLean Virginia - Software Engineer

February 2009 - November 2016

- Worked as a contractor for the <u>Center for Advanced Aviation System</u> <u>Development</u>, which is an FFRDC that develops prototypes for the FAA.
- Used a mix of Java, GWT, and JavaScript to create frontends, "middle ends", and visualizations used by air traffic control prototype research.
- Development was very conversation-based. A researcher gets an idea for a new algorithm or display, and I rapidly develop a proof of concept and then we iterate together, aka evolutionary prototyping.

Education

George Mason University, Virginia - MS in Computer Science

2011 - 2015

- Obtained a master's degree in Computer Science while working full time.
- Cool projects include: pathfinding using ant colony optimization, generating mazes with evolutionary computation, predicting Ludum Dare scores from descriptions, developing an AR Android game, and building an "artistic" drawing robot (full disclosure: it wasn't very artistic).

Millersville University, Pennsylvania — BS in Computer Science

2004 - 2008

- Helped create and implement a new undergraduate robotics course.
- Worked as tech support at the university's help desk, as an undergraduate researcher, and as the assistant system admin in the CS department.
- Other activities included tutoring, speaking at conferences, running CS camps, and way more independent studies than was strictly necessary.
- Interned at the National Institute of Standards and Technology.

References

References are available upon request. 😺

