

Experience

Student Teaching – Lakewood, CO

Bear Creek High School

2021 - 2022

- Coordinated by the University of Colorado Denver
- Co-taught in two high school math classrooms, including honors geometry, precalculus, and algebra 1 classes
- Tutored students individually in a variety of math subjects in the school's tutoring center

Newlon Elementary School – Denver, CO

School Technology Specialist and Site Assessment Leader, 2019 - 2021

- Worked directly with teachers, administrators, and students to facilitate easy, unified technology standards and use throughout the school
- Addressed day-to-day problems with school technology
- Coordinated all state- and federally-mandated student testing throughout the year
- Administered one-on-one tests to kindergarten through fifth-graders in English and Spanish

Amazon – Cambridge, MA

Software Development Engineer, 2018 - 2019

SDE Intern, Summer 2017

- Designed and implemented “watermarking” technology with a small team of researchers and engineers to prevent false wakes when “Alexa” is said by a non-human source; placed a watermark on nearly 50 advertisements since the project's start, including Amazon's 2019 Super Bowl advertisement
- Monitored and mitigated round-the-clock service issues and outages in Alexa's wake-up behavior for all languages and device types, including “hotfix” software releases, rollbacks, and device behavior alarms
- Wrote, reviewed, and released software for all 100 million Alexa-enabled devices in an agile, sprint-based process that involved team-based design, testing, and approval

ImageMaker – Santiago, Chile

Software Engineering Intern, Fall 2016

- Designed and coded front end proposals for the company's products and applications using Angular, Javascript, and HTML
- Collaborated with a Spanish-speaking team to design and build products for Spanish-speaking customers throughout Latin America, including banks, airlines, and retail stores

Education

University of Colorado Denver

Masters of Arts in Teaching

Expected graduation May 2022

Tufts University – Medford, MA

Class of 2018, GPA: 3.75

B.A. Computer Science and Spanish
magna cum laude with highest thesis honors

Skills and Certifications

Colorado Department of Education

Substitute Teacher Authorization

Effective 4/25/2021 - 4/25/2024

Praxis exam: Mathematics Content Knowledge (5161) - 6/25/21

Score: 186/200 (Colorado qualifying score 152/200)

Programming languages and technologies:

C++, C, Python, Java, HTML, CSS, JavaScript, Haskell, among others

Human languages:

Spanish, fluent

Projects

Thesis

The Imbalance in Latin American Technology Production and Non-Native Language Computer Programming (2018)
akerch.com/thesis.pdf

Publications

Blast Accusations for Cybersecurity Intel
published in 2600 Magazine, Spring 2019
akerch.com/blast.pdf

The Pipe Dream of Sensible School Internet Policy, published in 2600 Magazine, Spring 2020
akerch.com/pipedream.pdf