

# Jake Vossen

COLORADO SCHOOL OF MINES CLASS OF 2022, B.S. COMPUTER SCIENCE

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*“Programs must be written for people to read, and only incidentally for machines to execute” – SICP*

## Education

### Colorado School of Mines

Golden, Colorado

B.S. COMPUTER SCIENCE

August 2018 - May 2022

MINOR IN ECONOMICS

- Major GPA: 3.95 || Overall GPA: 3.46 (Honor Roll, Spring 2019; Deans List, Fall 2019 & Spring 2020)
- Relevant courses (Computer Science)
  - Completed: Data Structures (C++), Advanced Software Engineering, Software Engineering (Java), Database Management, Compiler Design, Introduction to Linux, Introduction to Computer Science (Python)
  - Enrolled: Algorithms, Programming Languages (OCaml), Computer Simulations
- Relevant courses (Economics)
  - Completed: Energy Economics
  - Enrolled: Intermediate Microeconomics, Property Rights and Natural Resources
- Study abroad: Kenya 2019 - Prepared and taught lessons on Arduinos and 3D modeling to middle school and high school aged youth and conducted entrepreneurial self-efficacy and market research
- 2019 British Petroleum (BP) C-MAPP Scholar

## Technical Skills

- **Programming Languages**
  - **Advanced:** Python, Java
  - **Intermediate:** Typescript, C++, Rust, SQL
  - **Beginner:** Haskell, Swift
- **Development Tools**
  - Deployment Tools: AWS, Docker, Linux Server Maintenance & Management
  - Other Tools: Git, GitHub, Bash,  $\LaTeX$ , GNU Make
- **Team Skills & Leadership:** Agile Scrum team member, U-CLIMB Lead Mentor for CSCI 101 (see Employment), Eagle Scout
- **Certifications:** Associate Amazon Web Services Solution's Architect (2018-2021)

## Experience

### Nextworld LLC

Denver Tech Center

ASSOCIATE SOFTWARE ENGINEER

Summer 2018, 2019, 2020

Three summers of software development with backend Java and frontend Angular. Each summer I worked at a different part of the company, and my code was deployed bi-weekly, reviewed by stakeholders, and delivered to customers. I was involved in large GitHub projects that utilized advanced GitHub functionality such as code reviews and CI/CD. Nextworld used Agile Scrum methodologies, and I took part in sprint planning, retrospectives, and backlog grooming.

- Full stack developer (Summer 2020)
  - Developed Java REST API code to generate reports using Nextworld data, which included accessing PostgreSQL databases
  - Wrote TypeScript/Angular to add new features to the Nextworld report builder
- Front end web developer (Summer 2019)
  - Used TypeScript/Angular to implement features and improvements to the Nextworld enterprise software platform
  - Used the Nativescript toolkit to improve the iOS and Android mobile apps
- Integrations specialist (Summer 2018)
  - Used Rest APIs and cloud services to implement endpoints to next generation enterprise software (C#)

### Colorado School of Mines

Golden, Colorado

LINUX SYSTEM ADMINISTRATOR

- Performed maintenance, upkeep, and upgrades on 6 Ubuntu servers
- Updated several websites for CS@Mines projects
- Provided and managed package mirrors for Arch Linux and Ubuntu

TEACHING ASSISTANT - INTRO TO LINUX

- Held office hours, assisted students in Linux and shell scripting basics

## U-CLIMB MENTOR FOR COMPUTER SCIENCE 101

- Lead Mentor (Spring 2020)
  - Managed U-CLIMB mentors, scheduling, task distribution, and creating / presenting training material
  - Performed interviews and made hiring decisions for future mentors
- Mentor (Fall 2019)
  - Assisted with instructing lessons about algorithms, data structures, and other introductory computer science material
  - Provided one-on-one mentorship and support for Computer Science 101 students

## Datava

Remote

### CS@MINES FIELD SESSION (UNPAID)

Summer 2020

- Migrated backend stack (PHP, Apache, MySQL) to a containerized system using Docker
- Got trained on scrum, product design, and other software engineering concepts
- Acted as product owner, which included developing definition of done and creating a requirements document

## Valor Christian High School

Highlands Ranch, Colorado

### IT INTERN

September 2015 - May 2018

- Managed 550 Apple devices, from hardware maintenance to software deployment and assisted in network configuration in a Jamf JSS environment, as well as assisting in budget approval and project management
- Migrated on premise servers to cloud based solutions

## Awards

2020	<b>Fourth Best Overall Hack</b> , Hack CU VI Hackathon	University of Colorado
2018	<b>Best Use of Twilio API</b> , MHacks 11 Hackathon	University of Michigan
2019	<b>Most Random Hack</b> , Hack CU V Hackathon	University of Colorado
2019	<b>Second Overall</b> , Google Passport Design Challenge	Google Boulder
2018	<b>Presenter</b> , C-MAPP Event - CSCI 101 Poster Presentation	Colorado School of Mines
2018	<b>Eagle Scout</b> , Boy Scouts of America	Troop 628

## Extracurricular Activities

### Association of Computing - Women (ACM-W)

Golden, Colorado

#### SECRETARY

Fall 2020

- Helped plan club meetings with goal of increasing diversity in the field of Computer Science
- Presented several talks, including talks on  $\text{\LaTeX}$  and data privacy/security
- Managed attendance tracking to distribute extra credit for a variety of courses

### Colorado School of Mines OreSec Cybersecurity Club

Golden, Colorado

#### VICE PRESIDENT & COFOUNDER

Spring 2019 - Fall 2020

- Organized club meetings and gave presentations about cybersecurity topics
- Raised awareness of personal privacy and security around campus
- Gave presentation on the reverse engineering tool Ghidra

### Association of Computing (ACM)

Golden, Colorado

#### MEMBER

Fall 2018 - Current

- Participated in Hackathons and other club events and programming competitions
- Volunteered for the High School Programming Competition hosted by Mines to encourage interest in CS@Mines

### Linux Users Group (LUG)

Golden, Colorado

#### MEMBER

Fall 2018 - Current

- Interfaced with club to determine requirements for the servers I controlled as the CS@Mines system administrator (see experience section)
- Participated in club meetings to discuss and learn more about Linux and related subjects

### Boy Scouts of America - Lone Tree, CO

Lone Tree

#### EAGLE SCOUT

September 2017

- Learned leadership skills through outdoor adventures including trips to Florida for sailing and Minnesota for backpacking