# Alonzo Altamirano

Fresh computer science graduate seeking mentorship, experience, and challenge in the high-tech industry.

## Education

2015–2019 B.S. Computer & Information Science, University of Oregon, Eugene, OR, 3.81

Minor in Mathematics. Focuses include Parallel Computing, Compiler Construction, Computer Networking, and Artificial Intelligence.

# **Projects**

**Full Stack Developer**, *Tournament of Tournaments App*, San Francisco Bay Area. I architected, developed, published, and maintain a distributed system for handling a Tournament of Tournaments. This system consists of a database, a server program, a REST API, an RPC API, a web app, an Android application, and an iOS application. Achievements:

- o Optimized performance and network usage to minimize cost on AWS EC2 and S3.
- o Developed a high performance server implemented 100% in ES6 leverageing Node.js and
- o Exercised dozens of core computer science concepts such as novel algorithm design and analysis, creation of state machines, usage of data structures, usage of graph theory, etc.
- Published applications on the Google Play Store and iOS App Store. Continually process bug reports and interact with Users. Continuously integrate, develop, and deploy fixes and new features.

# Work

#### Computing

2018–2019 Undergraduate Researcher, CDUX Research Group, University of Oregon.

Conducted research into high performance computing on behalf of the Department of Energy and the National Science Foundation.

Achievements:

- o Developed novel algorithms leveraging data parallel primitives in collaboration with doctoral students.
- o Ported and parallelized serial code for the Visualization Toolkit (VTK-m).
- 2018 Learning Assistant, Department of Computer and Information Science, University of Oregon.

Provided supplementary education and personal tutoring to a class of 150 2nd year computer science students.

Achievements:

- Taught debugging techniques 15 hours weekly.
- o Used collaborative learning techniques to communicate elemental data structure and algorithm design.

San Francisco Bay Area, CA

#### Miscellaneous

### 2017–2020 Mathematics Tutor, Self-Employed, Eugene, OR/San Ramon, CA.

Privately tutored Differential and Integral Calculus, Linear Algebra, and Discrete and Combinatorial Mathematics. Worked flexibly with relaying complex information to students in personally tailored methods.

## Skills

AWS	EC2	S3	Google Cloud
Python	TensorFlow	NumPy	Pandas
С	C++	Bison	Lex
HTML5	CSS3	JavaScript/ES6	React.js
iOS	Android	React Native	Express.js
Git	REGEX	jQuery	Node.js
UNIX	SQL	Puppet	Swift
Data Mining	Big Data	Protocols	Java
DevOps	PostgreSQL	APIs	Docker

## Activities

## University of Oregon ACM International Collegiate Programming **Competition Team**, Flagship Team.

Represented the University of Oregon in the world's premier programming competition against teams from top universities such as Stanford, University of Washington, and UC Berkeley. Developed strong relationships and fluid teamwork with my copartners.

### **University of Oregon ARLISS**, Autonomous Drone Competition Team.

Represented the University of Oregon at ARLISS competition in Black Rock Desert, Nevada. Built an autonomously driving drone which could withstand a rocket launch and ejection at 10,000ft. Constructed a rocket to earn Level 1 and Level 2 HPR Certification from the National Association of Rocketry.

## University of Oregon Cybersecurity Club, Member.

Studied computer vulnerabilities in the context of protecting one's digital assets. Disseminated information to students and faculty about personal cybersecurity.

#### Oregon Blockchain Group, Member.

Studied the systems enabled by blockchain technology in the context of enterprise. Attended seminars conducted by industry leaders in blockchain application, such as Ripple, Public Market, GE, and Intel.

#### University of Oregon Makers Club, Member.

Learned and practiced skills such as soldering, using powered drills, rotary tools, and saws, 3D modelling and printing, and programming microcontrollers.

# Awards

2018 Phillip Seeley Scholarship in Computer and Information Science 2019 Luks Programming Competition - 1st Place 2017 Juilfs Programming Competition - 1st Place 2018 Luks Programming Competition - 3rd Place

# Hobbies

Ultimate Disc Golf Frisbee

Backpacking Music Production