

# XILAI ZHANG

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<https://xilaizhang.vercel.app/>

<https://github.com/XilaiZhang>

## EDUCATION

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### University of California, Los Angeles

Master of Science, Computer Science

*Expected Dec. 2021*

- GPA: **3.96**

Bachelor of Science, Computer Science

*Sep. 2016 - Jun. 2020*

- GPA: 3.87, *Summa Cum Laude*

Coursework: Web Applications, High Performance Computing, Databases, Parallel architectures, Scalable Internet Services, Networking, Compiler, Computer architecture, Operating System, Advanced Data Mining and many more.

## ACHIEVEMENTS

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**Skills:** C++, Python, Java, Node.js, Scala, Go, React, Angular, Redux, MySQL, Mongo, Kubernetes, Docker

**Publication:** *Discrete Geometric Simulation of Elastic Ribbons*, APS March Meeting 2019, 2nd author.

**Competition:** **Google Code Jam 2021 Round 1A Global Ranking 857** (Contestant ID: XilaiZhang)

## EXPERIENCE

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### Yahoo!

Jun. 2021 - Sep. 2021

*Software Engineer Intern*

Yahoo! Sports Team, Sunnyvale, CA

- Refactored Yahoo Fantasy Sports night-king microservice with incorporation of Temporal, to tackle reliability, scalability and error tolerance issues in the old system.
- Migrated from old backend logics to Temporal logics using Java, added centralized service management to track service anomalies and web UI interface for visualization.
- Deployed and scaled frontend, backend, and server with Kubernetes.

### Amazon

Mar. 2021 - May 2021

*Software Engineer Intern*

PerfectMile Team, Remote

- Translated barrel codes to run on AWS. Optimized triggering logic with reusable Python scripts.
- Promoted team knowledge sharing with training sessions on data system configurations. Standardized Bifrost pipelines and added support for Egypt and Saudi Arabia markets.
- Created frontend templates for internal dashboard for customer reviews, ticket managements and team status. Innovated automated tools to port HTML and CSS to Amazon wiki markdown syntax with Python.

### Arista Networks

Jun. 2019 - Sep. 2019

*Software Engineer Intern*

vEOS Team, Santa Clara, CA

- Implemented netlink modules for container extensible OS router with C++. Greatly improved speed of module.

### SOLAR Software Eng Lab (UCLA)

Mar. 2021 - Present

*Graduate Research Assistant*

Director: Professor Miryung Kim

- Metrics and strategies to deal with data, performance and memory skew in Spark applications.

## PROJECTS

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*CFC Reviews*: a mini-reddit app to review soccer players

<https://cfcreviews.herokuapp.com/>

- Designed and implemented customized features such as bar rating, search, ranking and commenting, along with robust features of posting, editing, deleting etc. Built with Node.js, Express, Mongo, HTML and CSS.

*Ribbon Structures*: C++ simulation

<https://meetings.aps.org/Meeting/MAR19/Session/R56.6>

- Developed a uniform numerical model to simulate elastic ribbons undergoing large deformations using C++

*Distributed Iterative Belief Propagation*

- Combined try lock strategy with token ring passing topology. Probably the first distributed C++ implementation of IBP on the internet.