

Ravi Riley

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UC BERKELEY COLLEGE OF ENGINEERING

Electrical Engineering & Computer Science (EECS), B.S. | 2020 - 2024

CRESCENTA VALLEY HIGH SCHOOL

GPA: 4.3 | 2016 - 2020

EXTRACURRICULARS

- Founder and President of Ping Pong Club
- Founder and President of Political Pizza Club
- President of Future Business Leaders of America (FBLA)
- Vice President of Math Competition Club
- Glendale Environmental Coalition Youth
- Link Crew Leader

ATHLETICS

- Varsity Cross Country
16:48 3 mile
- Varsity Track
2:04 800m
4:57 mile
- JV Volleyball

WORK EXPERIENCE

INTOOLOVATION, INC. | PROTOTYPING ENGINEER & WEB DEVELOPER

June 2018 – Present

intoolovation.com

- Developed company e-commerce website, implemented SEO best practices and achieved #1 on multiple search engine rankings for desired keywords
- Turned conceptual idea of a re-imagined ratcheting wrench into a real product with Computer Aided Design software, then prototyped the patented invention with additive manufacturing
- Assessed multiple products in production pipeline, from concept design to launch.

CV ENTERPRISES | Co-FOUNDER, WEB DEVELOPER, SYSADMIN

August 2018 – August 2020

cventerprises.org

- Co-founded an organization of 50+ web & mobile developers
- Migrated & deployed website to a fully automated backend I developed for future ease of use
- Managed teams with an agile methodology based workflow using Slack, GitHub, Trello
- Worked on a software development curriculum that was approved as an honors course by the Board of Education & taught 40+ computer science students Java, Python, Git, C++
- Built a virtual course on building automated stock trading systems and created a data management system for course students
- sysadmin of in-house Linux server

FREELANCE 3D PRINTING & CAD | 3D PRINTING AND DESIGN SPECIALIST

July 2016 – Present

@dimensionsprinting

- Founder of an on-demand 3D printing and CAD/3D modeling/design business
- Sale of products I design and fabricate + designing custom products tailored to customers' needs
- 1k+ orders delivered

FRC 589 ROBOTICS | DESIGN TEAM AND CAD TEAM LEADER

January 2016 – March 2020

cvrobots.com

- Leader in the design process from initial conceptualization to producing detailed CAD
- Created fabrication drawings, renders, and CAD of 4 different robots
- Worked on prototyping, design, CAD, systems integration, testing, and electronics subsystems
- Helped the team win the Engineering Inspiration Award twice and the Chairman's Award

PPE FOR COVID-19 | GITHUB.COM/RAVIRILEY/PPE-FOR-COVID19

March 2020 – Present

- Founded a community movement to fabricate 1000+ face shields and surgical mask strain relievers for healthcare workers at local hospitals, essential workers, and high school teachers.
- Built effort from just me to a network of 20+ volunteers & coordinated logistics for sanitary PPE deliveries.

- Wrote an OpenSCAD script for STL stack generation to help others easily 3D print many parts simultaneously and a STL-to-OpenSCAD file converter.

PROJECTS

AGENCY JEKYLL THEME | Liquid, HTML, CSS, Sass, JS | [GITHUB.COM/RAVIRILEY/AGENCY-JEKYLL-THEME](https://github.com/raviriley/agency-jekyll-theme)

Created a Jekyll theme with 3000+ downloads & multiple features on theme websites. Added a backend-less contact form, page generation from YAML files, Markdown support, Google Analytics, and much more. Currently in use by UCI's Genomics, Computation and Sequencing Mortazavi Laboratory and 100+ companies.

STOCK CORRELATION WEB-APP | Python, Flask

Finds the correlation coefficient between 2 or more stocks over a user-specified time interval, then generates a correlation matrix and visualizes the strength of the correlation over time.

STATISTICAL ARBITRAGE AUTOMATED TRADING STRATEGY | Python, SQLite

Built a data management system and implemented a statistical arbitrage trading strategy on top of it that executes through the TD Ameritrade and Robinhood APIs. Autonomous algorithm can effectively predict volatility at a 90% confidence level and whether the opportunity is a buy or sell at a 75% confidence level.

SKILLS

LANGUAGES	English, Chinese (Mandarin)
PROGRAMMING	Python, Java, Liquid, Jekyll, Flask, HTML, CSS, Sass, JS, C#, SQL, Linux, Git
GENERAL	Photoshop, Markdown, L ^A T _E X, JupyterLab, Bash scripting, UNIX CLI, Regex
COMPUTER AIDED DESIGN	Autodesk (Inventor, Fusion 360, Meshmixer, Netfabb), OpenSCAD, SketchUp
3D PRINTING	Simplify 3D, Cura; construction, maintenance, operation of any FDM 3D printer
FABRICATION	3D printing, CNC, soldering, circuits, laser engraving, basic wood-shop
INTERPERSONAL	Leadership, Public Speaking, Presentation, Teamwork, Communication

AWARDS

YOUTH CHINESE LANGUAGE CHALLENGE 1ST PLACE ESSAY COMPETITION | MAY 2016

I won an essay competition with my Mandarin essay against both native and non-native Mandarin speakers up to 18 years of age.

COMPUTER PROBLEM SOLVING TOP 10 FINALIST FUTURE BUSINESS LEADERS OF AMERICA (FBLA) | FEBRUARY 2019

Recognized for achievement on an assessment of a broad base of knowledge and competency in core hardware and operating system technologies including installation, configuration, diagnostics, preventative maintenance, basic networking, and computer architecture. Achieved 7th place out of 300+ contestants.

CV TOWN COUNCIL SCHOLARSHIP JUNE 2020

Recognized for outstanding academic achievement, local community service, and entrepreneurship.

AP SCHOLAR WITH DISTINCTION MAY 2020

Awarded to students who average a minimum of 3.5 on all their AP exams and score 3 or more on at least five of them.

COMMENDED NATIONAL MERIT SCHOLAR SEPT 2019

Awarded to the top 2.2% of students in the USA who demonstrated exceptional academic promise.

SCHOLAR ATHLETE VARSITY CROSS COUNTRY, TRACK, AND VOLLEYBALL | 2016, 2017, 2018, 2019, 2020

Recognized for maintaining a 3.5 or higher GPA while participating in a sport; received eight times total in Cross Country, Track, and Volleyball, and received the Highest GPA Award twice.