

# Aaron Wang

562-374-1195 | [aaronwanglucky@gmail.com](mailto:aaronwanglucky@gmail.com) | [aaronfwang.com](http://aaronfwang.com) | [linkedin.com/in/aaron](https://linkedin.com/in/aaron) | [github.com/1aaronw](https://github.com/1aaronw)

## EDUCATION

---

**University of California, Riverside**  
*Bachelor of Science in Computer Science*

Awards: Dean's Honors List, Chancellor's Honors List  
*September 2022 - January 2026*

## PROJECTS

---

**Portfolio Website** | *TypeScript, Next.js, Tailwind CSS*

[GitHub](#)

- Developed and deployed a full stack portfolio website using TypeScript and Tailwind to
- Implemented interactive and downloadable resume using TypeScript
- Developed reusable components (navBar, header) in Tailwind to style multiple site pages

**CLI-Lock (Password Management Tool)** | *C++*

UC Riverside

- Developed password management tool that stores account information for multiple domains
- Implements Crypto++ library to encrypt user information
- Constructed the password quality handler and password generation functions
- Implemented password generation that meets the quality standards of an acceptable strong password and derives words from a dictionary file.
- Increased speed of user generation of strong passwords by up to ~90% from creating a function to instantaneously generate passwords using a dictionary of 200+ words

**TV Character Database Visualizer** | *React.js*

[GitHub](#)

- Built a visual database using React of characters appearing in Better Call Saul
- Fetched data via Axios from a dedicated API (<https://breakingbadapi.com/>) and developed a character list only pertaining to the Better Call Saul category
- Implemented and enhanced a card-based data visualisation generating character images, names, nicknames, and real actors
- Improved accuracy of the API by 9% by re-configuring the API to fetch correct character data in database

**Clipboard (Chrome Extension)** | *JavaScript, HTML*

[GitHub](#)

- Developed a chrome extension responsible for storing notes on a Google Chrome tab
- Designed for saving information onto browser cache and has the ability to be cleared completely off it
- Implemented re-expandable text pad in order to scale the quantity of user's text

**Parallelized Sudoku Solver** | *Python*

[GitHub](#)

- Developed and implemented both a parallelized and non-parallelized application of solving 9x9 Sudoku grids
- Integrated multi-threading to parallelize the pre-computation of valid moves to enhance scalability and computational efficiency
- Implemented caching to compute and store valid candidates for each cell, significantly reducing computational redundancy and improving runtime performance
- Conducted performance testing and benchmarking, achieving a measurable speedup of 51.9% in comparison to the non-parallelized application

## INVOLVEMENT

---

**Association for Computing Machinery (ACM)** | *Member*

September 2022 – Present

- Member of UCR's ACM club, focused on learning computing and expanding interest in computer science
- Participated in Cutie Hack 2022 and led a group of 4 in the creation of Optimal Oranges Calculator

## TECHNICAL SKILLS

---

**Languages:** C/C++, JavaScript, Java, Python, Tailwind CSS, TypeScript

**Developer Tools & Frameworks:** Next.js, Unix, Git, Powershell

**Libraries:** React.js, Node.js, Axios, Crypto++

**Relevant Coursework:** Intermediate Data Structures and Algorithms, Logic Design, Discrete Structures, Software Construction, Operating Systems, Concurrent Programming and Parallel Systems, Linear Algebra