CHRIS CARL

Union City, CA 94587 | +1 (561) 809-4387 | chrisbcarl@outlook.com | http://chriscarl.com | LinkedIn

Senior Software Engineer

Transforming Theory into Effective Practice

Objective

Seeking mastery and intuition of the fundamentals of machine learning, deep learning, and artificial intelligence to apply novel problem-solving approaches to today's existential challenges. Automation specialist with a proven track record of creating efficient software solutions, leading teams, and adapting academic principles to problems in real-world contexts.

Skills

High Proficiency: Python | SQL | PowerShell | Git | Software Architecture | Full Stack | Software Automation **Medium Proficiency:** Bash | Flask | Angular | API | Concurrency | Microservices | Jira | Data Analytics

Education

- Jan 2025 May 2025: Open University, taking Discrete Mathematics San Jose State University, CA
- Dec 2024 Jul 2025: Post Graduate (Certificate) Program in Al and ML University of Texas at Austin, Online
- Jan 2015 May 2019: B.S. in Computer Science / Computer Engineering Florida Atlantic University, FL

Experience

Intel Corporation | Santa Clara, CA

Senior Software Engineer | January 2023 - September 2024

Served as a Tech Lead, Innovator, and System Administrator on a previously established team and drove effective efforts to reduce inefficiency while continuing sustaining support of this and the prior team's workflow.

- Co-owned the reliability qualification of 6th Gen Intel® Xeon® codenamed Granite Rapids using Python, SQL, and PowerShell for automated server testing. Partnered with 10 specialists in a cross-discipline posture, reduced bring-up time from 6 to 2 months, enabled customer-facing hardware telemetry, and more.
- Pioneered a pandas + matplotlib data analysis and visualization pipeline that identified 3 unique experiment showstoppers and was essential to rectify the affected experiments and verify the efficacy of the solutions.
- Partner Project Manager on a team of 7, created the requirements specifications, drove technical implementation discussion, and resulted in a deployment which reduced manual labor and misses by 30%.
- Implemented Shift Left into the existing automation like detecting hardware misconfiguration within first 5 rather than 20 execution minutes, reducing boot times from 30 to 8 minutes, and others.
- System Administrator of 5 on-prem servers and handled operating system upgrades, patching, software licenses, and redundant SSD storage pools for multiple teams totaling ~50 engineers.
- Refactored the existing core library with 12K deletions and 35k insertions over 673 files within 1 year.

Intel Corporation | Folsom, CA

Software Engineer | May 2018 - January 2023

Grew into the roles of Software Architect, Data Architect, Full Stack Engineer, and System Administrator and Data Architect owning "RDTF" and "ATLAS"—a big data scale automation ecosystem impacting ~25 engineers, collecting telemetry from ~200 testing servers, and achieved 120K+ days of combined test time since initial launch in Jun 2019.

- Architected, implemented, and lead the team for "RDTF"—an internal full stack Python/SQL server testing and telemetry framework used to declare market readiness on hundreds of \$M of Intel® Optane™ 100 Series and 200 Series Persistent Memory products.
- System Administrator and Data Architect of novel SQL database schemas at big data scale for "RDTF" and "ATLAS", impacting ~25 engineers, ~200 testing servers, and 120K+ days of combined test time starting Jun 2019.

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- Architected and implemented "ATLAS"—a full stack Angular/Python/SQL microservices data collection suite for product engineers to automate their JMP and Excel workflows, saving on average 10-50 work hours per month across the team since 2019.
- Reduced query execution time by 30-50% by educating team members about transaction isolation and data locality.

Florida Atlantic University Division of Research | Boca Raton, FL

Software Internship | October 2017 - May 2018

Gathered customer-obsessed requirements and designed software architectures independently.

- Architected and implemented the full stack for "Occupancy Heat Map" an IOT sensor research endeavor to track room occupancy telemetry, which included its Angular UI, Python API, MongoDB schema, and D3.js data visualization
- Architected the Angular UI front-end and collaborated with a team of 4 on "Intelligent River" an
 environmentally focused IOT research endeavor to collect telemetry from environmental monitoring devices,
 implemented the Angular 5 architecture, login authentication, RxJS-based data sharing, over 4 different features,
 and documentation for others to continue the project.

Xertigo | Boca Raton, FL

Software Internship | May 2017 - October 2017

Learned the foundations of software culture, agile, and work ethic.

- Implemented three API endpoints, four test suites, several SQL migration scripts for Walmart and other clients.
- Code Reviewer, participated in agile standup meetings, and approved pull requests submitted by software developer contractors.
- Utilized Docker containers hosted on Linux VM's deployed in AWS for development.

Community Involvement

Intel Corporation | Folsom, CA + Santa Clara, CA

Software and Python Instructor; Intern Mentor | 2019 – 2024

Hosted academically oriented crash courses in Python, SQL, Web, Dev Ops, Git, Agile, and Databases with 25+
hours of dedicated internal video recordings. Mentored several interns throughout the years regardless of team
proximity.

Intel Corporation | Folsom, CA + Santa Clara, CA

"Kid to Work Day" Instructor | July 2019 - July 2020

• Volunteered as an instructor, introduced elementary students to web concept design and middle school students to pseudocode! Check it out here: https://github.com/chrisbcarl/hangman

Vista Del Lago High School | Folsom, CA

Student Tutoring | August 2018 - May 2019

• Weekly tutoring sessions with several other Intel colleagues providing free tutoring services in math, science, statistics, and even English!

Code for Grove - Cyber Security Bootcamp | Elk Grove, CA

Instructor | June 2018

 Volunteered as an instructor at a 2-day boot camp for high school students introducing cyber security, password security, social engineering, client-server architecture, ciphers, and even PKI! https://www.prlog.org/12710912-code-for-grove-to-hold-2-day-cybersecurity-bootcamp.html