

# Ryan G. Tjakrakartadinata

Phone: 405-612-8768

E-mail: [rgtjakrakartadinata@dons.usfca.edu](mailto:rgtjakrakartadinata@dons.usfca.edu)

Location: San Francisco Bay Area

LinkedIn: [linkedin.com/in/ryantjakrak](https://linkedin.com/in/ryantjakrak)

GitHub: [github.com/tjakrak](https://github.com/tjakrak)

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## Education

<b>University of San Francisco</b> <i>Master of Science in Computer Science</i> GPA 3.96 / 4.00	Aug 2020 – Dec 2022	<b>Oklahoma State University</b> <i>Bachelor of Science in Industrial Engineering and Management</i> GPA 2.78 / 4.0	Aug 2011 – Dec 2015
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## Work Experience

<b>Headway – Milpitas, California</b> <i>Software Engineer Intern</i>	Jun 2022 – Aug 2022
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- Performed ETL on  $\pm 21$  million rows of data using SQL and Python
- Built an application to predict the processing time of each tool in the manufacturing floor based on the queue, batch sizes, operations, and tools

<b>Calix – San Jose, California</b> <i>Software Engineer Intern</i>	Jun 2021 – Sep 2021
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- Improve reliability by improving a Python script that checks for backward compatibilities between releases
- Implemented infrastructure improvements by resolving JIRA tickets arising from customers' request

<b>Livongo – Mountain View, California</b> <i>Data Ops Analyst Intern</i>	Aug 2020 – Nov 2020
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- Performed data standardization of suffixes and prefixes for  $\pm 20,000$  user names utilizing Regex
- Led coordination with 2 client-facing teams to consolidate all key client data & information in a central dataset, eliminating the need for manual inquiries on a client-by-client basis

<b>Qualitest @Google – Mountain View, California</b> <i>Google Search Analyst</i>	June 2017 – Feb 2020
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- Trained machine learning model through data labeling
- Queried and analyzed dataset from Google internal Database to support the launch of a new feature
- Identified bugs from Google Search products and collaborated with relevant engineers to resolve the bugs
- Surfaced data-driven insights to the stakeholders for the launch of new Google Search feature in Indonesia

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## Projects

- **Number-Tool Language** – Implement a command line program that can interpret simple ntlang expressions for working with different number bases and bit widths.  
Key skills: C, struct, bit shifting
- **HDFS** – Implement a simplified HDFS using Go  
Key skills: Go, TCP, socket, channel, gob, protobuf
- **Reliable File Transfer** – Implement a reliable data transfer protocol between multiple hosts.  
Key skills: Java, TCP, checksum, socket, Go-Back-N, Stop-and-Wait, thread
- **Cloud Storage Service** – Designed a cloud storage service with replicated backend servers and a command line client application.  
Key skills: C, Go, socket, sha1sum, threadpool, server, client

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## Languages

- Java, C, Python, Golang, SQL, HTML, CSS, D3.js, ARM, Racket, ReactJS, and SwiftUI