

WORK EXPERIENCE	Apple Inc. (iCloud) - San Francisco, CA	2016 - Present
	Software Engineer	http://apple.com/
	<ul style="list-style-type: none"> Designed key aspects of the backing storage engine that enables iCloud to scale to hundreds of millions of users each month. Architected the new multi-tenant online compaction system which provides higher throughput guarantees and reliability by distributing workloads over backend resources evenly. Engineered a proactive solution to data loss prevention. Led to the discovery of several undiscovered, subtle bugs in the underlying frameworks and data store. Vastly reduced database load by introducing a job framework that allows numerous scheduled jobs share the same pooled resources concurrently. Languages / tools used: Scala, Java, Cassandra, MapReduce Frameworks. 	
	Cloudera - San Francisco, CA	Summer 2015
	Software Engineer Intern	http://cloudera.com/
	<ul style="list-style-type: none"> Implemented network performance increases in Apache Spark that reduced traffic by over 90%. Integrated Apache Avro as a first-class citizen into Spark core for use in RDDs. Languages / tools used: Scala, Java, Apache Spark. 	
	Google - New York, NY	Summer 2014
	SRE Engineering Practicum Intern	http://google.com/
	<ul style="list-style-type: none"> Implemented load testing infrastructure for newly released software, allowing for early detection of bugs and performance defects. Reduced request latency for back-end monitoring services by 70%. Languages / tools used: Java, Python Protocol Buffers, Google data stores. 	
	Amazon - Seattle, WA	Spring 2014
	Software Developer Engineer Intern	http://amazon.com/
	<ul style="list-style-type: none"> Overhauled internal search capabilities for the Enterprise Data Warehouse team, allowing for near real-time searching for financial datasets and results. Designed the new search system to be fault tolerant to preserve data integrity. Languages / tools used: Java, various AWS products, including Cloud-Search and SNS. 	
	John Hopkins University Applied Physics Lab - Laurel, MD	Summer 2013
	Engineering Intern	http://jhuapl.edu/
	<ul style="list-style-type: none"> Working with a team, developed a sensor management system used to control and collect data from multiple telescopes remotely. Languages / tools used: Java, Ant, SVN, SQL, Google Protocol Buffers. 	
EDUCATION	Rochester Institute of Technology - Rochester, NY	2012 - 2016
	Major: Computer Science	In-Major: 3.82 GPA, Overall: 3.60 Graduated <i>Cum Laude</i>
	<ul style="list-style-type: none"> Courses include: Programming Language Theory, Compiler Construction, Data Mining 	
SKILLS & CERTIFICATIONS	Languages Scala, Java, Python, Go, Rust	
	Tools Git, Spark, Avro, Gradle, PostgreSQL, Cassandra, Protocol Buffers, Thrift, OpenJDK JMH	
	Apache Spark Contributor Developed a solution to allow for Spark to efficiently read / write Apache Avro data formats. Worked on features in the Spark SQL engine.	
SELF-DIRECTED PROJECTS INCLUDE	Raft Key-Value Store	https://github.com/JDrit/RaftService
	<ul style="list-style-type: none"> Distributed key-value store that provides linearizability guarantees for all type of operations. Out of the box support for leader election, transparent handling of failing nodes, and correctness under network partition. 	
	CRDT Distributed Tally Service	https://github.com/JDrit/gossip-crdt
	<ul style="list-style-type: none"> Distributed backend counting service that is capable of withstanding large amounts of concurrent requests. Uses G-Counters as the backing asynchronous replication model. Utilizes a combination of lightweight threads for the request handling, Zookeeper for cluster state, and Thrift as the shared communication protocol. 	
	Github Language Analyzer	https://github.com/JDrit/github_stats
	<ul style="list-style-type: none"> Data analyzer and ingest pipeline using Go to analyze correlations in programming language usage across all of GitHub. Provides key insights to language usage trends over time and in comparison to each other. 	