

LUKE COOK

Software Engineer

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📍 Aurora, New York

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🐙 github.com/invocatis

EXPERIENCE

Application Programmer II

Cornell University

📅 June 2019 - Present

📍 Ithaca, New York

- Worked on backend of Genomic Data ETL application
- Refactored and redesigned legacy code base
- Developed a framework for automated system testing; focused on composability, ease of use, and self-cleanup
 - Developed domain-specific scripting language to simplify semantic layer of test suite in 3 layers: Arrange/Act, Assert, and Cleanup
 - Was implemented in 3 layers: A framework backend (written in Clojure), a business logic middle layer (Written in Java), and a testing logic script suite (Written in syntax defined by backend framework)
 - Cleanup ensured automatic test independence and idempotency
 - Produced JUnit results for integration with Bamboo CI/CD Pipeline

Java Bamboo Clojure Bash Docker PostgreSQL
Object-Oriented Design Layered Architecture

Software Engineer Coop

Intuit

📅 January 2018 - July 2018

📍 Mountain View, California

- Back end of Account Signup Springboot Application
- Agile team with daily standups, weekly meetings, and bi-weekly sprints
- Wrote a Java API for document upload, indexing documents in SQL Database and storing in AWS S3
- Created slash command for integrating SQL within Slack written in Clojure. Supported macros to simplify complicated statements, Slack context namespaces (user, team, channel, or global), and any SQL flavor that had a driver loaded into the microservice.

Java Oracle SQL Amazon S3 Springboot REST OOP
Agile Slack API CFG Clojure

Point-of-Sale Development

Swiftwater Brewing

📅 2015 - Present

📍 Rochester, NY

- Created a Point of Sale solution in Java and Java Swing, with MySQL Database
- Fulfilled credit card processing standards of security (PCI-DSS), ensuring the safe handling of credit card data
- Manage network architecture; setup OpenVPN to allow remote access to brewery equipment and POS system for maintenance.
- Worked as a bartender, using my solution and being around those who used it. Listened to their stories, complaints, and suggestions and incorporated them as new features.

Java Java Swing MySQL PCI/DSS Linux

EDUCATION

Bachelor's of Computer Science

Rochester Institute of Technology

📅 2017

📍 Rochester, New York

LANGUAGES

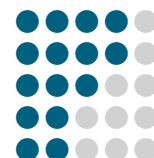
Clojure(script)

Java

Kotlin

Scala

Haskell



TECHNICAL SKILLS

MySQL PostgreSQL MongoDB
Git Docker Context-Free Grammar
Regex Bash Web Dev Bamboo

PROJECTS

retort

State Management for Hiccup

🐙 github.com/invocatis/retort

- CSS-like DSL for state dependencies, and transitions
- Gives robust ability to select and add attributes or arguments to hiccup structures
- Separates state and view logic elegantly

flip

Polyglot Database Solution

- Provides logic for creating, and including data-management modules
- Modules provide common features from existinc database solutions [id schemes, field inclusion/exclusion, data types/sizes, inheritance]

motif

Recursive Pattern Matching in Clojure

🐙 github.com/invocatis/motif

- Comprehensive, clean DSL for matching features of recursive, mixed data structures
- Patterns are data: Clojure collections and functions compose into patterns