

LUKE COOK

Software Engineer

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EXPERIENCE

Software Engineer Contractor

Hyperfiddle

June 2020 - Present

Remote

- Full stack development for CRUD App framework

Clojure

Clojurescript

Datomic

Application Programmer II

Cornell University

June 2019 - June 2020

Ithaca, New York

- Backend of Genomic Data ETL application
- Created CSV file digest framework
 - Data is streamed from file to PostgreSQL Database
 - JSON file declares how table rows are gotten from file
- 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

Java

Oracle SQL

Amazon S3

Springboot

REST

OOP

Agile

Slack API

CFG

Clojure

Point-of-Sale Development

Swiftwater Brewing

2015 - Present

Rochester, NY

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

Bamboo

Datomic

Git

Docker

Context-Free Grammar

Regex

Bash

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