

# Michael Dresser

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## **STACKWATCH (KUBECOST)** STAFF SOFTWARE ENGINEER

Aug 2023 - Present | Remote

- 100xed supportable scale by proposing, POCing, and productionizing a backend architecture overhaul. Enabled sales into a previously-inaccessible market segment. (Go, DuckDB)
- Acted as a link between my team and the company, especially by providing estimates and converting business objectives into actionable plans for fellow engineers.

## **STACKWATCH (KUBECOST)** SENIOR SOFTWARE ENGINEER

Feb 2022 - Aug 2023 | Remote

- Served as tech lead for Kubernetes (K8s) cost optimization.
- Scaled quantile-based container sizing recommendations to 250,000+ container environments. (Go)
- Designed a filtering language for core APIs. Built a lexer, parser, and interpreter. The new representation smoothed the path of later architecture improvements. (Go)
- Reduced developer feedback loop from 10 minutes to 30 seconds by setting up local runs, optimizing container builds, and evangelizing the improved workflow. (Go, Docker)
- Helped users upgrade without data loss by leading design and implementation of schema backwards-compatibility. (Go)

## **STACKWATCH (KUBECOST)** FULL STACK ENGINEER

Jan 2021 - Feb 2022 | Remote

- Built and marketed an open-source CLI. 700+ GitHub stars. (Go)
- Built a nightly CI/CD process. Provided easy internal testing and bleeding-edge user installs. (GitHub Actions, Docker, Helm)
- Built a feature to determine if K8s workloads can be rescheduled onto spot nodes, leading to >50% savings. (Go, TypeScript, React)

## **GOOGLE** SOFTWARE ENGINEERING INTERN

May 2020 - Aug 2020 | Remote

- Contributed to K8s test infra, simplifying E2E test workflow in an environment running >90,000 tests/month. (Go)
- Contributed patches to repos in the K8s project. (Go)

## **TWILIO** SOFTWARE ENGINEERING INTERN

May 2019 - Aug 2019 | Denver, CO

- Designed and built a microservice for account testing. Moved service into Kubernetes. Drove adoption in 3 teams. (Go)

## **LOGRHYTHM** SOFTWARE ENGINEERING INTERN

Jun 2018 - Aug 2018 | Boulder, CO

- Developed microservice to write logs to GCP Pub/Sub. (Go)

## CONFERENCE PRESENTATIONS

### **NODE SIZE MATTERS**

"Running K8s as Cheaply as Possible"  
KubeCon NA 2023 (November)  
Michael Dresser and Alex Meijer  
Link

## SKILLS

### LANGUAGES

Go • Python • Bash • SQL • Rust  
• Clojure • TypeScript •  
JavaScript • Scala • OCaml • Java

### TOOLS

Linux • Git • Kubernetes •  
Docker • DuckDB • SQLite •  
Prometheus • GCP • AWS •  
GitHub Actions

## EDUCATION

### **UNIVERSITY OF COLORADO BOULDER**

BS AND MS: COMPUTER SCIENCE  
GPA: 4.0 / 4.0

## SELECT PROJECTS

### **EVE ITEM DIFF**

Rust, WASM, HTML5  
Browser-local tool for diffing lists of items in the variety of text formats output by EVE Online. Backed by a custom parser. Link.

### **DICELANG**

Rust  
CLI or simple web frontend for evaluating DnD-like dice rolls, e.g. d20-1d4. Backed by a custom parser. Link: Web version.

### **THESIS: ARUGULA**

Scala  
A probabilistic programming language that I designed and implemented. It has special semantics that support delayed sampling of distributions combined with symbolic inference.