## Joshua De Matas

## Software Engineer

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## Summary

Operating at a senior level — leading projects, designing architecture, and building tools across domains. I've built backend platforms, SSH tunnels, and CLI tools, always with a focus on performance, clarity, and maintainability.

## Noteworthy projects

### BURNR — Tech Lead and Backend Engineer

A social fitness platform built primarily in Go.

- · Led backend design, service boundaries, and tech stack decisions.
- Designed hybrid storage using PostgreSQL, Firestore, and Cloud Storage.
- Integrated Apple Health syncing and leaderboard ranking based on user goals.
- · Upgraded caching and pub/sub with Dragonfly and Redpanda.
- Deployed backend on self-hosted VPS using Docker Stack/Swarm.

#### Garden Observer — Real-time 3D Robot Visualization

A full-stack web app to monitor live and simulated robot lawnmowers in 3D.

- Combined Unity Wasm for 3D rendering with Blazor for UI and control layer.
- Parsed SVG layouts to generate meshes for 3D environments.
- Used an internal event hub for real-time robot telemetry, updating position in 3D
- Created a Blazor-to-Unity component bridge (akin to custom React renderer).

#### Coconut - SSH-Based HTTP Tunnel

An HTTP tunnel over SSH in Go (similar to Ngrok), using only standard libraries.

- · Designed reverse proxy routing based on subdomains and SSH channels.
- · Added multiplexed and dedicated tunnels to handle websockets and long-lived connections.
- Currently building a production-ready version with full monitoring and tests.

## Cinnamon – Self-Hosted Media Server and Browser Extension

Created a self-hosted service to capture and store HLS video streams.

- Built a Go backend using FFmpeg to convert and stash videos.
- Integrated MinIO (S3 compatible) storage and built a lightweight web UI.
- Developed a custom browser protocol (cinnamon://) to launch downloads from the web.

## References

#### Tommy Gustavsson, Software Architect

tommy.gustavsson@husqvarnagroup.com +46 725877027

Husqvarna Group, Work/character reference (prefers email first)

#### Thomas Jansson, Lead Senior Software Engineer

thomas.jh.jansson@protonmail.com

LinkedIn

+46 708149315

Husqvarna Group, Work reference

#### Malin Janrup, Technical Project Manager

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Husqvarna Group, Character reference

## Technical skills

Go Docker GCP React
Terraform PostgreSQL Redis
Redpanda OpenTelemetry C#
Sqlite Unity Javascript
S3 storage Github SQL

## **Hobbies**

Programming, digital games, and board games. I enjoy making random programs and exploring solutions. Lately, I've been diving deeper into the internals of the tools I use — exploring how things really work.

Visit my

GitHub it's green

Digital notebook very casual

Portfolio read about projects

LinkedIn

CV again for whatever reason

# **Experience**

Programming since 2015, professional since 2020. Software engineering is both my profession and creative outlet.		
Go GCP Pub/Sub Redis Firestore PostgreSQL Terraform		
Grafana Prometheus OpenTelemetry		
atform.		
s-driven testing to validate system behavior.		
their growth through code reviews, architectural discussions, and pair programming		
Go Azure Unity DotNet C# Blazor Algorithms		
nen moved into broader R&D tooling.		
bator and successfully led four projects from concept through implementation and		
pain points and improved workflows across teams.		
domains — from Blazor and 3D web to Azure, algorithm optimization, CLI tools, and		
PostgreSQL NodeJS Express.js Vue Socket.IO		
t was visualized in a web UI.		
ing over 15 sensors in real time.		
Docker AWS Go Swift C++ NodeJS SQL		
L, and iOS development used in student instruction.		
demic years.		
tructures and algorithms, OOP, Node.js development, iOS development, and network		
han a job; it's what I do for fun. I love building systems that are useful, durable, and a joy to		
holarship		

## Jönköping University

**B.S. Computer Science** Jönköping University 2019 - 2022 Jönköping, Sweden

Chosen as one of the top-performing students to compete in a coding challenge at Jönköping University. Awarded a 15,000 SEK scholarship for building a full-stack admin system with React, Node.js (NestJS), Redis, and PostgreSQL.