# **Mitchell Mosure**

Seeking a full-time position as a software or machine learning engineer. Special interests in artificial general intelligence, consciousness, optimization, full-stack app development, computer vision, physical vapor deposition, and automation.

### Education

2016-2019 B.S. Computer Engineering, Science, and Mathematics

**University of Wisconsin - Madison** 

Focus on machine learning, optimization, and computer architecture

## Experience

#### 2020-Present Senior Software Engineer - Cisco

Developed and maintained multi-platform, media pipelines from grassroots to production

- · Integrated machine learning annotations
  - Custom operator fusing
- Developed next generation video pipeline effects
  - Scene-based, 3D video effects
  - Efficient pre/post processing
- CI/CD pipelines
  - Cross-platform builds
  - Automated performance testing
  - Automated documentation and release generation
- Consumed by multiple client teams

Intelligent conversational routing

• Implemented semantic routing of user queries to intent handlers

Integrated virtual assistant into Cisco RoomOS

- · Developed local and cloud audio recognition
- · Extensible directive engine for assistant interactions
- Pioneered advanced skill architecture and feature set

### 2014-2019 Software Engineer - CTech

- · Developed nesting and machine code optimization software for an AXYZ CNC
- · Developed a parametric configuration framework for BOM use
- Developed monitoring and reporting devices for critical hardware and processes
- · Developed shop routing and scheduling optimizer

- Engineered testing modules for various products and software
- Engineered products in several CAD/CAM suites
- Extensive Angular and ASP.NET Core Usage

# Projects

**inversify-cpp** Dependency injection framework for C++ /w optional dependency inspection

game-of-life Conway's Game of Life, implemented in Rust/WebGL

MitchBot Tacotron2 derivative TTS model

Fine-tuned Flowtron with 8 hours of my speech

ASR input, GPT-3 conversational NLU, TTS output

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