

# Michael Darweesh

mike@darweesh.org · linkedin.com/in/mdarweesh · Rochester, NY

---

Senior software engineer and technical co-founder with 30 years of experience shipping products at every scale—from two-person internal startups to platforms reaching hundreds of millions of users. Co-founded the project that became Google Hangouts. Built DRM systems that shipped in Windows and Office. Led teams across startups, defense, and space exploration. Currently building with AI-augmented development workflows and advising early-stage software startups.

## EXPERIENCE

---

**Co-founder & CTO** — Right Now Foundation Mar 2023 – Present

- Designed and built a real-time matchmaking platform connecting gig workers with customers using React Native and Go
- Architected the full stack from mobile client through backend services and infrastructure
- Managing C-Corp operations as co-founder including finances, product direction, and infrastructure

**Founder** — Yirp.org / Icebird Jan 2021 – Present

- Built and operate [Yirp](#), a URL shortening service with web and API interfaces, implemented in Go
- Built [JackCinder](#), a mobile-friendly browser-based MUD/IRC/SSH client with SSL/TLS and multi-session support
- Investigated viability of Reg CF crowdfunding application

**Director of Software Engineering** — Legalsifter Apr 2016 – Apr 2017

*Company was acquired after departure*

- Built and managed a team of 7 engineers, devops, and ML research programmers across local and offshore locations
- Planned and drove development of an ML/AI-powered contract analysis product from concept through launch
- Established engineering culture: code reviews, agile ceremonies, quality metrics, and architectural review process
- Set product roadmap with CEO and design team; represented engineering at customer and investor meetings

**Senior Staff Software Engineer** — General Dynamics C4 Systems (Viz) Nov 2012 – Jun 2014

- Led a software team through design and rapid prototyping of new defense products in Java and JavaScript
- Added geospatial mapping and database capabilities to existing products using MongoDB and Java
- Mentored junior software engineers and test engineers

**Technical Lead** — Google

Mar 2008 – Apr 2012

- Co-founded the internal project that became Google Hangouts—started as a two-engineer prototype, grew the full-time team to 5
- Designed and built the original Hangouts prototype; pitched and won executive sponsorship for the project
- Designed and implemented Instant Previews in Google Search in C++
- Organized and prioritized technical work across multiple concurrent product efforts
- Recruited and interviewed Hangouts engineers

**Senior Software Engineer** — Mars Space Flight Facility, ASU

Feb 2004 – Mar 2008

- Built a WMS-compliant planetary map server for Mars and the Moon, serving as the backend for the JMARS mission planning tool used by NASA scientists
- Implemented interactive web-based maps of Mars and Earth
- Collaborated with sysadmins on server architecture and monitoring; mentored junior developers and interns

**Software Design Engineer** — Microsoft

Mar 1998 – Dec 2003

- Designed and implemented Windows Media DRM and uDRM—the cross-platform DRM system that shipped in Windows and Microsoft Office to hundreds of millions of users
- Built DRM implementations for Mac, Linux, and Windows platforms
- Implemented new OS X UI components for Microsoft Office
- Led security practice adoption and managed code reviews for the engineering team

**Lead Software Engineer** — Autometric

Oct 1995 – Mar 1998

- Automated virtual human generation from speech scripts for defense and research applications
- Developed tooling for computer graphics animators; work showcased at ACM SIGGRAPH 1997
- Held Top Secret clearance

**ADVISING & MENTORSHIP**

---

**Startup Advisor** — Swartz Center for Entrepreneurship, CMU & Freelance

- Advise early-stage software startups on technical architecture, product strategy, and engineering team building

## Engineering Mentor

- Mentored junior and mid-level engineers across multiple organizations including Google, General Dynamics, Mars Space Flight Facility, and Microsoft
- Coached developers through architectural decisions, code reviews, career growth, and transitions into senior roles

## TECHNICAL SKILLS

---

<b>LANGUAGES</b>	C/C++, Go, JavaScript/TypeScript, Java, SQL, HTML/CSS, Python
<b>PLATFORMS</b>	Linux, macOS, Windows, React Native, Node.js
<b>INFRASTRUCTURE</b>	PostgreSQL, MongoDB, Docker, server architecture, system administration
<b>DOMAINS</b>	Full-stack web, mobile development, DRM/security, geospatial systems, ML/AI applications
<b>DEVELOPMENT</b>	AI-augmented development (Claude Code CLI), team leadership, architecture, code review

## EDUCATION

---

BS, Computer Science — SUNY at Buffalo

## PATENTS & PUBLICATIONS

---

System and method for manifest generation — Patent, 2003

Debugging an application that employs rights-managed content — Patent, 2003

Illumination Videocassette — ACM SIGGRAPH, 1997

The Creation of Realistic, Talking Computer Generated Humans Panel — Association of Medical Illustrators Conference, 1997