

# Frank Petrilli

Senior AI/ML & Site Reliability Engineer  
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## Work Experience

### Staff Production Engineer | Team Lead @ Meta From 2025

Staff Engineer leading a team of Production Engineers working on Meta's AI/ML training data systems

- Achieved 22% OpEx savings across Meta's substantial global ML data infra
- Developed novel solution to hot cache petabyte-scale data with reduced footprint, unblocking critical revenue impact
- Led reliability efforts protecting Meta's most critical AI/ML workflows

### Senior AI/ML Engineer | Team Lead @ Google 2023-2025

Senior Engineer leading a team of Cross-Functional Experts to solve Google Cloud's longest running, most complex issues.

- Built and led a team of Cross-Functional Experts, our top engineers who focus on our most complex issues
- Key PoC for strategic customer issues; direct interaction with Google Cloud CEO Thomas Kurian
- Subject Matter Expert for AI on Kubernetes, GPU/TPU and RDMA networking

### Senior Site Reliability Engineer [GKE] | Working Group Lead @ Google 2020-2023

Senior Engineer leading a team of SREs focused on Production Security

- Led a team delivering regulatory compliance objectives for GKE's customers
- Designed & led cross-functional projects spanning multiple quarters to implement new compliant administrative access tools

### Senior Technical Solutions Engineer | K8S Networking SME @ Google 2019-2020

Senior Technical Solutions Engineer on Google Cloud Platform Kubernetes & Networking

- Led & developed a team of intermediate engineers, growing from new hire to senior members of engineering staff
- Designed & led global initiatives to improve customer satisfaction & reduce engineering time
- Led the work of an international team of engineers spanning four timezones

### Technical Solutions Engineer III | Networking SME @ Google 2018-2019

Technical Solutions Engineer on Google Cloud Platform Kubernetes & Networking

### Software Engineer @ Protocol Labs 2016-2018

Software Engineer on the IPFS project

## Entrepreneurship

### Founder & President @ Lambda58

Founder & President of Lambda58, a microelectronics & RF consulting firm

- Provided RF consulting services to a variety of clients in the UAS industry, focusing on LTE/5G connectivity
- Developed a variety of custom solutions to problems in the UAS space, including Detect-and-Avoid and long range telemetry systems

## Skills

### Languages

- C / C++
- GoLang
- C#
- Python
- Javascript
- SQL
- x86/ARM ASM

### Systems

- Kubernetes
- Docker
- Linux / Windows
- Google Cloud
- Cisco
- Juniper
- Ceph

### Concepts

- Embedded
- AI/ML
- Distributed
- Networking
- Security

### Miscellaneous

- GPU/TPU
- ESP32
- STM32
- FreeRTOS
- 3GPP [LTE/5G]

## Education

Bachelor of Science in Computer Science  
Eastern Washington University

## Certifications

- CBRS CPI - Google, 2021
- Radio License - Extra [P97] - FCC, 2018
- Pilot Certificate [P107] - FAA, 2022

## Interests

- Long-Range Radio Communications
- 3D Design & Printing
- Aerospace Engineering
- Embedded Software & Hardware Design

## Open Source

**Core Developer** on *ExpressLRS* [4k☆]  
an open source LoRa-based high-performance long-range radio link focused on speed & range

**Creator** of *fpvout* [200☆]  
an open source toolkit for video out from DJI FPV goggles