

David Goehrig

Technologist

David J. Goehrig

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David Goehrig is a seasoned technologist with expertise in IoT, AI/ML, network security, cloud computing, and emerging technologies. David has led more than 30 rapid prototypes of scalable solutions for giants like Dyson, Red Bull, DHL, Scania, Verizon, SEGA, and has consulted for companies like Delaware North, Disney, Google, ESPN, and SONY. Projects have included connected vehicles, drone systems, smart factories, delivery tracking, point of sales, game AI, ML assistants, and AR/VR simulations. David has worked in leadership roles and pioneered global ML applications, computer vision, real-time search, and consumer electronics, gaming, mobile video, and telecom. David excels at innovative problem-solving, making him the perfect hire for teams aiming to prototype, scale, and disrupt cutting-edge tech.

Experience

Amazon Web Services EMEA Sarl / Senior Prototype Architect

Feb 2018 - PRESENT, Luxembourg

Worked with AWS's customers' engineering teams to rapidly prototype new products. Some of the more than 30 projects include:

- Connected vehicle / IoT platform for Dyson's electric car
- IoT drone flight control system with Inmarsat and Atechsyn
- 1M msgs/s leader board for Red Bull's Wings for Life charity run
- IoT Parcel tracking device for high value goods for DHL
- Augmented reality for IoT smart tools for Scania smart factory
- AI/ML powered dash cams for Verizon
- Electric Vehicle charging station management platform
- Injected molded plastic machine IoT / DAQ gateway for Krauss-Maffei
- LoRaWAN connected smart thermostat with tado°
- CCTV AI/ML + IoT platforms with pedestrian detection for Humanising Autonomy
- AI/ML + IoT platform for person of interest detection with Oosto
- MQTT based electronic security system with Securitas
- Android / BTLE provisioning for handheld IoT scanner with ProGlove
- OPCUA factory management system with DRÄXLMAIER
- AWS Outpost lab for the EMEA lab
- Secure communications for Anybotic's robot dog
- AI mobile crane operator manual for Hiab
- Smart sales assistant for Arceormital
- AI assistant for Warhammer 40k, Creative Assembly / SEGA
- AI power HR agent for Visma
- Delivery driver tracking and point of sales for JustEat
- Microsoft AD & Certificate Management for NBMI
- MCP server that converts whiteboard diagrams to deploy architecture for AWS
- and many more...

Open Robotics Company / Founder

February 2016 - PRESENT, Buffalo NY / Luxembourg

We turn everyday things into robots. Design and develop open source software and hardware to make it easy for students of all ages to build robots. We are a not-for-profit open source hardware for education.

Delaware North / Dev-Ops Consultant

June 2017 - Dec 2017, Buffalo NY

Performed an internal audit of the Delaware North network and designed a new software defined network plan to help them migrate their managed properties from MPLS to cheaper cable and fiber offerings.

wot.io / Founder & Chief Scientist

April 2014 - December 2015, New York, NY

Invented a data service exchange to connect M2M & IoT devices to containerized business applications via a graph programming language message bus.

- Designed a multi-datacenter, multi-cloud container orchestration platform supporting OpenStack, Rackspace, AWS, Azure, and GCP.
- Developed a soft-real time multi-protocol message bus that could scale to millions of messages per second
- Created IoT PoCs across multiple hardware architectures, ARM, MIPS, Xtensa, x86, etc. with a variety of IoT and M2M protocols
- Worked with partners to develop their go to market strategies
- Message bus service discovery - patent WO2016134267A1 / EP3259898A1
- Device platform integrating disparate data sources - patent US20170093700A1

Critical Media / Chief Scientist, VP of New Products

August 2011 - April 2014, New York, NY

I researched & developed new products leveraging machine learning, natural language processing, computer vision, machine translation, speech recognition, and real time search on a global scale.

Synacor / Staff Engineer, Researcher

November 2009 - August 2011, Buffalo, NY

Created an internal research and development lab focusing on integrating Synacor's video and identity management platform into the consumer electronics space. Worked with companies like Toshiba and LG to build new rich internet application that were identity aware.

Evangelizmo / Founder

September 2008 - August 2009, Buffalo, NY

Evangelizmo provides a multi-channel messaging platform for open source e-commerce platforms.

Self-Employed / Open Source Consultant

November 2003 - PRESENT, New York, NY & San Francisco CA

Consulted on a wide range of new product developments in the fields of gaming, online video, and telecommunications:

- Ported Youtube to Qualcomm brew for Google
- Developed a mobile app for Stephen Colbert's *The Word*
- Game development for iHomegame.com, backend, AI, and bots
- Developed the World Series of Poker mobile app for ESPN
- Designed a Friday Night Fights boxing simulation for ESPN
- Created a mobile video scavenger hunt for SONY
- Developed a Youtube player for ICTV's set top box platform
- Developed Justin.tv's flash video recorder software
- Created an SMS gateway for Soapbox Mobile
- Designed a live greenscreen app for the Academy Awards
- Produced social media web games for Mt. Dew and X-Games
- Provide technical evaluations for M&A, start-up strategy.

The Sporting News / Senior Programmer

September 2001 - October 2003, New York, NY

Designed new massively multi-player fantasy sports and simulation games for the NFL, MLB, and NHL. Created the first real time live fantasy sports draft system.

VA Linux Systems / Software Engineer

June 2000 - May 2001, Sunnyvale, CA

Co-developed the "Build to Order Software System" factory automation component. Also worked on the first JBOD (network attached storage prototype), multi-core AMD based Linux system, Itanium Linux, and brought 32bit LBA addressing support to fdisk.

Skills

C, C++, Erlang / OTP, Perl, Python, Ruby, Lua, Javascript, Typescript, Java, Kotlin, Swift, Objective-C, Smalltalk, Ocaml, Forth, Go,

Linux, Ruby on Rails, nodejs, Vue, Express, React, React Native, Android, iOS, Mac, Windows, FreeRTOS, Zephyr, mbed OS.

X86, arm, mips, xtensa, mpcxxx, simd, trainium, glsl, wasm, gcc rtl.

Device drivers, crypto libraries, messaging protocols, websockets, mqtt, amqp, zmq, tcp/ip, tls, openssl, mbedtls, x509, certificate management.

AWS, GCP, Azure, Docker, containers, orchestration, devops, ansible, terraform, cloudformation, cdk,

AI/ML, Amazon Bedrock, Grok, OpenAI, MCP, A2A, pytorch, numpy, opencv, tensorflow, pg_vector, Cohere, Anthropic, trainium native sdk

Ffmpeg, g-streamer, kinesis video, h264, mjpeg, rtsp, rtp, mpeg-ts

Postgresql, MySQL, Redis, RabbitMQ, mosquitto, paho, SQLite, plsql, DynamoDB, couchdb, cassandra, S3, NFS, vfs, extfs, lvm, fuse

Cisco, Juniper, BGP, iBGP, networking, DNS, DHCP, mDNS, service discovery, avahi, bluetooth, wifi, m2m, etsi, routing, firewalls, ip over ip

Hobbies include circuit board design, Verilog, Forth ASIC design, Role playing games, Dota 2, Blackdesert Online, Deadlock, and Starcraft 2.

