

# Andrew Kallinikos

## Senior Software Engineer

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A Senior Software Engineer that brings a wealth of experience in designing, implementing, testing, and maintaining sophisticated software systems. My expertise lies in rapidly adapting to and mastering new technologies, backed by a broad spectrum of technical skills. Known for my analytical and problem-solving abilities, I excel in high-pressure environments and consistently take proactive steps towards achieving success.

## Skills

**Languages:** C, C++, Go, Python, Typescript/Javascript, Lua, Java, Rust, PHP, C#

**Libraries/Frameworks:** NextJs, React, GStreamer, Tailwind, NodeJs, TensorFlow, GatsbyJs, JQuery, Bootstrap, ASP.NET

**Tools/Infrastructure:** Git, AWS (Lambda, EC2, SES, Route 53, Kinesis, Rekognition), GCP, Nginx, Apache, Azure, GraphQL, Postgres, MySQL, Neo4j

## Professional Experience

**Resideo Technologies**, Melville, NY

08/2019-Present

### Sr. Software Engineer

- Led feature development and maintenance of a media backend service for Linux and Android-based security panels, enabling live streaming from video doorbells and security cameras in over 1.5 million devices and growing utilizing C/Rust and Gstreamer
- Unified codebases across various product lines, leading to a significant reduction in maintenance needs and time required for new feature development
- Researched, trained, and implemented AI/ML models to innovate and enhance security product capabilities
- Expanded code coverage to 75% or better across systems developed and maintained by my team
- Routinely called upon to consult on stalled projects outside my primary expertise, contributing fresh perspectives to kickstart progress

**Adlexx, LLC**, Greater NYC Area

01/2018-08/2019

### Software Engineer

- Developed B2B and B2C interactive web applications and backend services for small to medium businesses using Javascript, PHP, and NodeJs on various IaaS providers (AWS, DigitalOcean, Google Cloud, etc)
- Engineered a suite of white-label solutions that reduced project deliverable times, boosting operational efficiency and client satisfaction in our technical consulting services
- Implemented an AI/ML-driven Recommendation Engine, offering tailored product suggestions based on consumer data
- Often was responsible for full project lifecycle and directly dealing with clients

**FORTË**, New York, NY

05/2016-08/2017

### Junior Software Engineer

- Developed live streaming backend services for fitness classes through Azure Media Services
- Engineered an automated camera switching service using facial recognition AI models in Python
- Provided QA for web application and ensured UI integrity by developing automated tests in C#
- Diagnosed and resolved reliability issues affecting Azure Media Streaming Services

## Projects

**Forsea Forecasting** ([forseasurf.com](https://forseasurf.com), [app.forseasurf.com](https://app.forseasurf.com), [blog.forseasurf.com](https://blog.forseasurf.com))

2019-Present

### Founder

- A web application for marine forecasting and live conditions built using React/NextJS, Go, and Python
- Reduced live data reporting latency up to 99.996% compared to largest commercial weather providers
- Backend systems handle ~5,000,000 weather reports and process Terabytes of forecast data daily
- Created a range algorithms to dynamically update custom swell models, deal with outages at reporting stations, and suggest surf locations based on preferences
- Modular Monolith architecture using AWS services in combination with a Vitess MySQL Cluster allows for microservice benefits with rapid development for a solo developer

## Education

**The Pennsylvania State University** University Park, PA

**B.S. in Electrical Engineering** (Focus: Computer Engineering) December 2017