ILLYA STARIKOV

Starikov.co @starikov.co San Francisco Bay Area

ill.YAH stah.REE.kohw | He/Him | _____

Software Engineer scaling AI to build the future of digital communication. Architected ML systems across 7 product lines achieving 98.5% accuracy. Driven to solve impactful, real-world problems using data, science, and mathematics.

EXPERIENCE

1/2025 Software Engineer Google Beam

Research, Labs

San Francisco Bay Area

- Owned camera hardware-in-the-loop test (HILT) infrastructure, enabling new tests, hardware, and platforms
 - \circ Eliminated 105-day camera HILT failure streak \in 1 month of start-date, resolved 10^+ blocking issues
- o Re-architected camera software updater for multi-peripheral support, integrating new hardware configurations
- Reduced system image by 30% (700 MB), implemented CI/CD presubmit checks, and built developer tooling

1/2025 9/2023 Software Engineer

Research. Labs

San Francisco Bay Area

Google Beam

- o Designed end-to-end factory software architecture, adopted by Google-HP partnership
 - o Aligned 25 cross-functional stakeholders spanning engineering, security, and program management
- o Built secure data pipeline between Google and HP factories, enabling real-time production monitoring [spot bonus]
- Unified factory interface through comprehensive testing and calibration framework
 - o Integrated 6 mission-critical subsystems: audio, camera, displays, lighting, OS, USB
 - o Formulated system health-checking as a factory final-assembly test via a Diagnostics framework [spot bonus]
- Automated 25⁺ manual preflight tests, saving 2⁺ days of engineer time in 2024 alone

9/2023 12/2019 Software Engineer

Platforms & Devices Product Area San Francisco Bav Area

Google Central Test Engineering

- \circ Shipped 10 M⁺ Nest Cam, Pixel Tablet, Pixel Buds Pro/2 devices as factory audio software DRI [2 \times peer bonus] \circ Saved \$120 k in capex via test code optimizations: Nest Cam (52\% time reduced), Pixel Tablet (23\%)
- Built ML-driven analytics system transforming factory data into actionable insights for 7[×] Nest and Pixel products \circ Deployed 6 ML applications: clustering novel failure patterns to make 10^+ datasets, classification of said patterns with 98.5% accuracy, regression for additional quality metrics within 1/2 dB accuracy [2^{\times} peer bonus]
- o Mentored intern who built a data fusion of {"3D" Lidar + "2D" photos}, implementing feature matching via ML SuperGlue Network and OpenCV ORB, producing color depth-maps and interactive 3D reconstructions

12/2019

Software Engineer

Aviation

Kansas City Area

7/2018

Garmin Safety & Datalink

- Led system testing achieving DO-178B aviation safety compliance for GDL-60 datalink receiver
- o Developed embedded software enabling configuration sync across dual OS environments (Garmin, Linux)

EXPERTISE

Languages Python, C++, C, Bash, SQL, LaTeX, Swift, C#, Lua, Perl tech

P G C G E PIFX N

ML/AI scikit-learn, TensorFlow, Colab, GCP Vertex AI

Tools Docker, Git, Make, regex, tmux, Vim, Xcode, CI/CD, Linux

Python Cython, matplotlib, numpy, pandas, pdb, pyenv, SciPy, sphinx, tox, venv

C++17 abseil, Boost, catch2, Ildb, STL, valgrind

impact

8 products launched, 15^+ interviews conducted, 1 intern mentored, 800^+ CLs submitted, 300^+ code reviews, 100^+ bugs fixed, 9 managers, 8^{\times} Google Peer Bonus, 4^{\times} Google Spot Bonus, Google Recognition Award, 1^{st} Place MegaMiner Al, Summa Cum Laude, 6^{\times} Dean's List, $18^{th}/229$ S&T programmer

EDUCATION

12/2018

Bachelor of Science Computer Science

Set

Missouri University of Science and Technology

Rolla, MO

Coursework Artificial Intelligence, Evolutionary Computing, Data Mining, Object-Oriented Numerical Modeling, Analysis of Algorithms, Undergraduate Research, Differential Equations, Calculus, Linear Algebra, Statistics, Modern Physics