









# ILLYA STARIKOV

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San Francisco Bay Area














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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	<b>Software Engineer</b>	Research, Labs
	<b>Google</b> Beam	San Francisco Bay Area
	<ul style="list-style-type: none"><li>Owned camera hardware-in-the-loop test (HILT) infrastructure, enabling new tests, hardware, and platforms<ul style="list-style-type: none"><li>Eliminated 105-day camera HILT failure streak in first month, maintained via solving 10+ critical issues</li></ul></li><li>Re-architected camera software updater for multi-peripheral support, integrating new hardware configurations</li><li>Reduced system image by 30% (700 MB), implemented CI/CD presubmit checks, and built developer tooling</li></ul>	
1/2025	<b>Software Engineer</b>	Research, Labs
9/2023	<b>Google</b> Beam	San Francisco Bay Area
	<ul style="list-style-type: none"><li>Designed end-to-end factory software architecture, <b>adopted by Google-HP partnership</b><ul style="list-style-type: none"><li>Aligned 25 cross-functional stakeholders spanning engineering, security, and program management</li></ul></li><li>Built secure data pipeline between Google and HP factories, enabling real-time production monitoring</li><li>Unified factory interface through comprehensive testing and calibration framework<ul style="list-style-type: none"><li>Integrated 6 mission-critical subsystems: audio, camera, displays, lighting, OS, USB</li><li>Formulated system health-checking as a factory final-assembly test via a Diagnostics framework</li></ul></li><li>Automated 25+ manual preflight tests, saving 2+ days of engineer time in 2024 alone</li></ul>	
9/2023	<b>Software Engineer</b>	Platforms & Devices Product Area
12/2019	<b>Google</b> Central Test Engineering	San Francisco Bay Area
	<ul style="list-style-type: none"><li>Shipped 10 M+ <b>Nest Cam, Pixel Tablet, Pixel Buds Pro 1/2</b> devices as factory audio software DRI</li><li>Built ML-driven analytics system transforming factory data into actionable insights for 7× Nest and Pixel products<ul style="list-style-type: none"><li>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</li></ul></li><li>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</li></ul>	
12/2019	<b>Software Engineer</b>	Aviation
7/2018	<b>Garmin</b> Safety & Datalink	Kansas City Area
	<ul style="list-style-type: none"><li>Led system testing achieving DO-178B aviation safety compliance for <b>GDL-60</b> datalink receiver</li><li>Developed embedded software enabling configuration sync across dual OS environments (Garmin, Linux)</li></ul>	
	Software Engineering Intern <b>Garmin</b> Interfaces/Data Routing .....	8/2017– 6/2018
	Software Engineering Intern <b>Garmin</b> Automotive OEM .....	5/2017– 8/2017
	Team Lead & DRI <b>Missouri S&amp;T Satellite Team</b> .....	4/2016–12/2017
	Undergraduate Teaching Assistant <b>Missouri S&amp;T</b> Computer Science .....	8/2016– 4/2017

## EXPERTISE

tech	<b>Languages</b> Python, C++, C, Bash, SQL, LaTeX, Swift, C#, Lua, Perl	         
	<b>ML/AI</b> scikit-learn, TensorFlow, Colab, GCP Vertex AI	  
	<b>Tools</b> Docker, Git, Make, regex, tmux, Vim, Xcode, CI/CD, Linux	
	<b>Python</b> Cython, matplotlib, numpy, pandas, pdb, pyenv, SciPy, sphinx, tox, venv	
	<b>C++17</b> abseil, Boost, catch2, lldb, STL, valgrind	
impact	8 products launched, 15+ interviews conducted, 1 intern mentored, 800+ CLs submitted, 300+ code reviews, 100+ bugs fixed, 9 managers, 8× Google Peer Bonus, 4× Google Spot Bonus, Google Recognition Award, 1 <sup>st</sup> Place MegaMiner AI, Summa Cum Laude honors, 6× Dean's List, 18 <sup>th</sup> /229 S&T programmer	

## EDUCATION

12/2018	<b>Bachelor of Science</b> Computer Science	
	<b>Missouri University of Science and Technology</b>	Rolla, MO
	<b>Coursework</b> Artificial Intelligence, Evolutionary Computing, Data Mining, Object-Oriented Numerical Modeling, Analysis of Algorithms, Undergraduate Research, Differential Equations, Calculus, Linear Algebra, Statistics, Modern Physics	