

# ILLYA STARIKOV

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ill-ya star-y-kov | He/Him |    
 $\int_{2017}^{\infty} \text{expertise (Data Science, Cloud, System Design)} dt = 7^+ \text{ YoE}$   
Software Engineer applying AI & ML to build the future of digital communication. *Pursuing opportunities to put a dent in the universe.*

## VOCATION

- 9/2023  **Software Engineer** *Research, Labs*  
**Google** Project Starline *San Francisco Bay Area*
- Designed the end-to-end factory software architecture, **adopted by Google and HP**
    - Aligning 25+ cross-functional engineering managers, ICs, security council, and program management
  - Implemented the standard factory interface for Starline OS, responsible for interfacing, testing, and calibrating
    - Integrated three subsystems into said interface, including one audio functional test
    - Formulated Diagnostics framework, responsible for system health checking as a factory final-assembly test
- 9/2023 **Software Engineer** *Devices & Services Product Area (DSPA)*  
12/2019 **Google** Central Test Engineering *San Francisco Bay Area*
- Factory audio software DRI for **Nest Cam, Pixel Tablet, Pixel Buds Pro**
  - Architected an ML system to make Nest and Pixel factory data more insightful and actionable
    - Pioneered **6** novel ML use-cases, across **7** programs, with accuracy up to **98.5%**
    - Example pipelines include clustering common failures from previous products, classifying said failures in future products, and using regression to produce new metrics or replace old ones
  - Hosted 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*  
7/2018 **Garmin** Safety & Datalink *Greater Kansas City Area*
- Lead system testing effort** to meet DO-178B compliance on GDL-60
  - Implemented embedded software to synchronize configuration between two operating systems
- 7/2018 **Software Engineering Intern** *Aviation*  
8/2017 **Garmin** Interfaces/Data Routing *Rolla, MO*
- Implemented quality-of-life improvements for a highly-utilized aviation tool
  - Implemented validation system for said tool, resulting in **25% code reduction** in affected classes
- 8/2017 **Software Engineering Intern** *Automotive OEM*  
5/2017 **Garmin** *Greater Los Angeles Area*
- Brought-up and maintained automation suite to assess the performance of navigation routing
  - Enhanced reliability (**80% to 100% success rate**) and execution time (**5x speed up**) of automation suite by developing on-device APIs and consuming new, optimized APIs in test suite
-  **Team Lead & DRI Missouri S&T Satellite Team** 4/2016-12/2017  
**Undergraduate Teaching Assistant** Computer Science **Missouri S&T** 8/2016-4/2017

## ATTRIBUTES

- tech | **Languages** Python, C++, C, Bash, SQL,  $\text{\LaTeX}$   
*Previous* Swift, C#, Lua, Perl  
**ML** scikit-learn, TensorFlow, Colab, Google Cloud Platform (GCP)  
**Tools** Git, i3wm, Make, regex, tmux, Tmuxinator, Vim, Xcode & iOS toolchain, ZSH  
**Python** Cython, matplotlib, numpy, pandas, pdb, pyenv, SciPy, sphinx, tox, venv  
**C++17** Boost, catch2, lldb, STL, valgrind
- misc | 7 projects, 15 interviews, 1 intern, > 700 CLs, > 100 "tickets", 8 managers, 8x Google Peer Bonus, 3x Google Spot Bonus, Googler Thank You Campaign receipt, 1<sup>st</sup> Place MegaMiner AI, Summa Cum Laude honors, 6x Deans List Award, 18<sup>th</sup>/229 S&T competitive programmer

## EDUCATION

- 12/2018 **Bachelor of Science** *Computer Science*  
 **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