

Andrew Fandrianto

Full Stack ML Engineer & “Engineer’s” People Manager

andrew@fto.xyz
github.com/laundry, +1-412-455-5404

EXPERIENCE

- **Apple** Cupertino, CA
Machine Learning Engineering Manager, AIML 2021-present
Machine Learning Engineer, AIML 2019-2021
 - Applied machine learning with external impact:
Impact: Improved quality of 7+ domains through 30+ statistically significant launches, about $\frac{3}{4}$ requiring ML. Led and contributed to search quality projects for Siri, Safari, and Spotlight.
Scope: Directly handled a majority of the end-to-end process: {ideation, privacy review, team management, xfunc collaboration/pitching, goal setting, device ground truth testing, backend migrations, data pipelines, server models, on-device models, eval, debug, launch, landing, metrics, monitoring, automation, postmortems}.
 - * User Feedback: Team and I built a comprehensive, debuggable framework to leverage user feedback. This framework is used by 10+ projects including our team directly and xfunc collaborators.
 - * Web Answers: E.g. [why is the ocean blue]. Improved Web Answers coverage by +xx% relative with models, classic and dense retrieval, query sampling, and practical hacks.
 - Built a team and helped grow the organization: Concurrently managing 7 (max 10) individual contributors. Directly hired 10+. Built and ramped a new team from scratch.
- **Google** Mountain View, CA
Software Engineer, Search Quality 2018-2019
Software Engineer, Research 2014-2018
 - Applied machine learning with external impact:
Impact: Led and/or contributed to projects for Search, Google Play, and the TensorFlow ecosystem {ops, TensorBoard}.
Scope: Typically handled these pieces: {data, model, eval, debug, launch, landing}.
 - * Related Answers: E.g. [why does reading on a train make me sleepy]. Text modeling for snippet ranking with BERT++. Led subgroup, mentored incoming engineers, improved xx% of Google Search and Assistant traffic.
 - * Short Answers: E.g. [what is the most abundant gas in venus]. Started cross functional effort between research and product engineering, jointly led subgroup, improved x% of Google Search and Assistant traffic.
 - * Play Store Search: Image modeling for app search quality with ImageNet++. Generated +\$xxM revenue.
 - Kaggle, but in Google:
2nd engineer for frontend/backend for our internal Kaggle website on Flex AppEngine, used by 20+ teams.
Owned datasets for internal/external machine learning research (n*100GB-m*1PB)
github.com/google-research-datasets/wiki-reading
- **eBay** San Jose, CA
Software Engineer 2013-2014
- **Language Technologies Institute at CMU** Pittsburgh, PA
Graduate Research Assistant 2011-2013
- **Microsoft** Mountain View, CA
Software Development Engineer Intern Summer 2011
Software Development Engineer Intern Summer 2010
- **ITA Software (acquired by Google)** Boston, MA
User Interface Engineering Intern Summer 2009
- **UC Berkeley Bioengineering, Professor Dan Fletcher** Berkeley, CA
Researcher @ Berkeley Bioengineering Summer Research Program Summer 2008
- **Cisco Systems** San Jose, CA
Software Developer Intern Summer 2006

EDUCATION

- **Carnegie Mellon University** Pittsburgh, PA
Master of Language Technologies 2013
Bachelor of Science in Computer Science 2011
- **The Harker School** San Jose, CA

SKILLS

- People: Technical Lead Manager for 2+ years. Mentored 20+.
- Computer Languages: Python, Shell, *SQL.
- Dusty Computer Languages: C++, Golang, Java, Scala, Jsonnet, Borgcfg, C, Javascript, C#, R, Matlab.
- Homosapien Languages: Conversant in Indonesian.
- Things: MapReduce++, Jupyter, pandas/sklearn/etc, TensorFlow, Superset, Presto/Trino, Docker, IntelliJ*, AWS, Git, Vim.
- Dusty Things: PyTorch, JAX, AppEngine, Perforce, Eclipse, Maven, Postgres, Kubernetes, Hadoop, Argo, Jenkins, Airflow.