Nicholas Charriere

developer, systems designer, leader

San Francisco, CA

nicholascharriere.com

nicholascharriere@gmail.com

github.com/nichochar

415-400-9427

SUMMARY

I am a developer and tech lead with a diverse background across various domains, with a recent focus on ML infrastructure. My core values are teamwork, impact, and simplicity. I believe in strong accountability for my work, and I am looking for opportunities to help teams solve hard problems.

WORK EXPERIENCE

Senior SWE & Tech Lead Manager, Cruise (ML Infrastructure) - *July 2018 - present*

⇢ Helped redesign our storage models & infrastructure to increase compression by 30%, latency by 400% and enable experimentation through a flexible architecture (Golang, bigtable, python)

⇢ Tech lead for executing the ["Continuous Learning Machine"](#) vision that allows ML models to self-improve continuously. This cross-team initiative closes the loop involved designing systems, processes & products all across the ML workflow (mining, training, evaluating, generating & reporting metrics). Significantly improved rate of experimentation which in turn led to a significant rate of improvement of the models (python, tensorflow, pytorch, react, k8s, KFP)

⇢ Founded and led the Data Foundation team (5 ICs) and acted as Technical Lead Manager for 1 year, while hiring for a manager. Helped 2 engineers get promoted during this time.

L4 Software Developer & Tech Lead, Pinterest - *June 2016 - July 2018*

⇢ Led design & implementation on the Pinterest "Protect Engine" (elixir, python) combining ML & rule heuristics for porn/spam/fraud detection in real-time.

⇢ Worked on the core API and it's middleware (python)

⇢ Supported the new user experience (NUX) team for any data pipelines, API, and backend needs.

⇢ [OSS] Was part of the open source initiative, owning projects (pymemcache, snappass, elixometer), encouraging open source mentality and contributions, and owning a few projects ([pymemcache](#), [snappass](#), [elixometer](#))

Senior Software Developer, URX - *June 2015 - June 2016*

This startup was small (I was employee 19), and we got acquired by Pinterest one year into my tenure.

⇢ Worked on the platform team to help design, implement, maintain and document various elements of the URX micro service architecture.

⇢ Feed ingestion ETL and indexing for our knowledge graph from multiple different sources using spark, HBase, Elastic Search, HDFS, Redash

Software Engineer, Server team, StarMaker Interactive - *June 2013 - June 2015*

⇢ Worked on the whole server stack: API, various backend jobs for data ingestion and analysis, data schema and DB interfaces (GCE, appengine, webapp2)

⇢ Summer intern for Bong working with D3 visualizations, 12 weeks in 2011.

SIDE PROJECTS

Avostories: web-based daily story writer to encourage a creative writing habit

Open source: I care deeply about contributing back and try and do so on different

projects (python and elixir) in my spare time.

bytesizetheories.com: alternative blog

EDUCATION

2013 Mines ParisTech - Paris, France

Master's Degree in Science and Executive Engineering

(placed 66/15,000, nationally, at the entrance exam)

TECHNICAL SKILLS

Comfortable writing any language, but proficient in python, javascript, elixir, & Golang.

Lots of experience using GCP, AWS, and open source tools over the years (kafka, bigtable, postgres, elasticsearch, redis, pub/sub, SNS, k8s, ...)

I have worked on ML infrastructure, distributed systems, data pipelines, orchestration, products (SDKs, libraries, websites, apps).

I generally am ready to adapt to any domain, read literature and attend conferences to ramp up my domain knowledge, and consider myself a lifelong learner.