

Senior Software Engineer seeking Front/Back/ML work

Available October 2019, need H-1B transfer

Work Experience

- 2018 – Now **Senior Software Engineer** at Criteo, Palo Alto, California
- Improved an ML data pipeline for creating campaign audiences of users likely install apps based on 5B rows of user data: Performed feature engineering, performance improvements and crash debugging.
- Designed and implemented the proof of concept for a new product to expand the App Install campaigns to users unknown to Criteo.
- Mentored other programmers in writing performant Spark code, introduced them to techniques such as property-based testing, efficient join techniques in Spark.
- Gave internal short talks, participated in several Hackathons.
- Keywords: **Spark**, Scala, scalatest, scalacheck, scalafmt, Machine Learning, JVM, classpath debugging, memory debugging, Graphite, Prometheus, Gradle, Git, Apache Marathon, Mesos, Consul
- 2016 – 2018 **Software Engineer** at Criteo, Paris, France and Palo Alto, California (*from intern to SE2*)
- Improved a user data aggregation MapReduce pipeline (used by 10+ teams internally) and its tests to improve agility, to reduce the complexity of its data formats (internal and external), to reduce errors when altering/adding new fields, and to change how it joined 90B users with the 350B products they have browsed across all of Criteo's clients.
- Significantly reduced tech debt and instability of a product-grouping Spark pipeline.
- Worked on client facing APIs for campaign audience management, including interactive audience size estimate based on criteria input by the clients, or based on anonymized lists of users.
- Oversaw and implemented the rehaul and expansion of an internal tool for the annotation of training/test sets for a machine-learning pipeline, and for the exploration of Criteo's product catalog.
- Implemented an OAuth-based client in order to integrate Criteo with advertisers who use Shopify in one click.
- Improved monitoring and Agile practices of each team I worked on.
- Keywords: **Hadoop** MapReduce, Spark, Scala, Grafana, Kibana, Maven, Apache Marathon, Mesos, **AngularNG**, AngularJS, **React**, TypeScript, **JavaScript**, webpack loaders, **Elasticsearch**, Finatra, OAuth, Shopify, C#

Talks

- 2018 **Tonight we won't talk about caching**: Lightning talk on naming advice. Presented at the San Francisco Python Meetup Group in January 2018.
- 2017 **Awaits, how do they work?**: Full-length talk on Python's recent async and await operators for **asynchronous programming**. Presented at PyBay in August 2017. **Slides** [<http://epsy.github.io/ahdtw/>].
- Unicode Primer** [https://www.youtube.com/watch?v=UXcOK7cm_Is]: Short talk on how to handle non-ASCII text in Python. Presented at Pyninsula in November 2017. **Slides** [<https://epsy.github.io/unicode-primer/reveal.js/>].
- 2016 Lightning talk on *napper*—a concept asynchronous ReST/HATEOAS client—at the Paris.py meetup
- 2015 Lightning talk on *clize* at the San Francisco Python Users Group

Open-source software

- 2011 – Now **clize** [<https://github.com/epsy/clize>]: Design, maintainance and support of a Python **opensource library**—a command-line argument parser—as well as its support library for metaprogramming (**sigtools** [<https://github.com/epsy/sigtools>]).
- Keywords: Opensource project management, metaprogramming, test suite design
- 2017 **PyBay** [<https://github.com/pybay/pybay>]: Implemented crucial parts of the conference website such as the Schedule page, enhanced mobile compatibility, fixed subtle CSS bugs.
- Keywords: **Django**, JavaScript, Mobile, CSS, GitHub
- 2016 **arcbus** [<https://arcbus.herokuapp.com/?@51.680533/-9.454387>]: Real-time bus schedule Web App using data fetched from an external API and presented in a **React**-based interface.
- Keywords: Web API scraping, **React**, Python
- 2012 – 2014 **tabledresser** [<https://www.reddit.com/u/tabledresser>]: Design and maintainance of an autonomous program ("robot") that converts the *Ask me anything* section of an online forum into Question/Answer tables.
- Keywords: Tight iterative development, use of REST APIs, aspects of natural language processing
- 2006 – 2012 **Armagetron Advanced** [<http://www.armagetronad.org/>]: Multiple contributions to an opensource game.
- Keywords: Online collaboration on a software project, network and video game programming

Education

- 2014 – 2017 **Master studies in Software Engineering**, minoring in Internet and Telecoms Efrei, Engineering School of Information and Digital Technologies - Villejuif (Paris), France
- Bachelor of Engineering in Computer Sciences and Mathematics** Partnership Efrei / Université Paris-Est Marne-La-Vallée (UPEM), France
- Exchanges with **UCC**, Cork, Ireland, **SJSU**, San José, California
- 2012 – 2014 **BSc Computing and IT** at The Open University, UK

Other

Languages: English (Bilingual), French (Bilingual), German

Hobbies: Photography, Hiking, Science-fiction