Waren Long

French & American citizenship

Experience

source{d} Madrid, Spain

Machine Learning Software Engineer

2017 to present - 2 years 7 months

- Mine and build massive datasets from software repositories.
- Design and train ML models applied to source code using a multi GPU cluster.
- Develop solutions for code completion, program repair, clone detection, identity matching, developer similarity.
- Publish research papers and talk in top-tier Data Mining and ML conferences.
- Conduct product demonstrations and integrate source{d} solutions into customers' environment.
- Love and contribute to Open Source.

CEDRIC Lab Paris, France

Research Software Engineer Intern

2017 - 6 months

- Implement a GRASP heuristic in Python to solve the Dial-A-Ride taxi-sharing Problem with Money as an incentive.
- Evaluation on public datasets of GPS taxi traces.

UCLA Department of Mathematics

Los Angeles, USA

Visiting Researcher

2016 – 4 months

- Design and implement in Matlab a macroscopic model to analyze traffic congestion using fluid mechanics equations.

Education

Conservatoire National des Arts et Métiers

Paris, France

MPRO Research Master's Degree in Computing Science, Operational Research

2016 - 2017

ENSTA ParisTech

Paris, France

Master of Science in Engineering, Optimization and Statistics

2014 - 2017

Preparatory classes PCSI/PC*, Physics and Chemistry

Neuilly-sur-Seine, France

2011 - 2014

Technical skills

Pasteur College

- o Languages: English, French, Spanish.
- o **Programming:** Python3, Go, C++, CUDA, SQL, Matlab, Julia, AMPL, LATEX.
- o Front & BI tools: HTML5, CSS3, JavaScript, React, Superset, Metabase, Tableau.
- o Models & Algorithms: bag-of-words, n-grams, GBDT, bayesian, clustering, embeddings, neural nets, topic modeling, linear optimization, shortest path, PageRank, community detection.
- ML frameworks: TensorFlow, Keras, PyTorch, scikit-learn, DGL, NLTK, DyNet.
- o **Technologies:** Linux, Git, Docker, Kubernetes, Apache Spark TM .
- Database: MySQL, PostgreSQL, Cassandra.

Publications

Vadim Markovtsev and Long Waren. Public Git Archive: A Big Code Dataset for All. In *Proceedings* of the 15th International Conference on Mining Software Repositories, MSR, New York, NY, USA, 2018. ACM.

Vadim Markovtsev, **Long Waren**, Egor Bulychev, Romain Keramitas, Konstantin Slavnov, and Gabor Markowski. **Splitting source code identifiers using Bidirectional LSTM Recurrent Neural Network**. In *Proceedings of the 1st International FLOC Workshop on Machine Learning for Programming*, MLP, 2018.

Vadim Markovtsev, Long Waren, Hugo Mougard, Konstantin Slavnov, and Egor Bulychev. STYLE-ANALYZER: Fixing Code Style Inconsistencies with Interpretable Unsupervised Algorithms. In Proceedings of the 16th International Conference on Mining Software Repositories, MSR, Piscataway, NJ, USA, 2019. IEEE Press.

Long Waren, Vadim Markovtsev, Hugo Mougard, Egor Bulychev, and Jan Hula. **Identifying collaborators in large codebases**. In *Proceedings of the 1st International ICSE Workshop on Machine Learning for Software Engineering*, ML4SE, 2019.

Talks

- Machine Learning on Source Code : from n-grams to GGNNs [slides]
 ML Meetup 2019 Nantes, France
- style-analyzer: Fixing Code Style Inconsistencies with Interpretable Unsupervised Algorithms [slides]
 MSR 2019 Montreal, Canada
- Empower developers with ML assisted code review [slides]
 Al Meetup 2019 Paris, France
- How AI can help programmers write better code? [slides]
 AI & Society Meetup 2019 Paris, France
- Splitting source code identifiers using Bidirectional LSTM [slides]
 MLP 2018 Oxford, UK
- Public Git Archive: A Big Code Dataset for All [slides]
 MSR 2018 Gothenburg, Sweden
- Analyzing GitHub, how developers change programming languages over time [slides]
 PyDays 2018 Vienna, Austria

Interests and Hobbies

- Sport:
 - Rugby player at Club de Rugby Liceo Francés
 - Golf (hcp. 7.3)
 - Scuba diving (N2 FFESSM, Advanced Open Water Padi)
- Adventure: Hiking and kayaking (Teide, Salcantay, Licancabur, Colorado river, Everglades).