

Nikolay Pavlovich Laptev

CONTACT INFORMATION

1 Hacker Way,
Menlo Park, CA, 94025

Voice: (408) 823-4845
Email: nlaptev@stanford.edu
www: www.nikolaylaptev.com

EDUCATION



Stanford University, Stanford, CA USA

- Postdoc, Electrical Engineering, December 2018.
- Research topic: Neural network interpretation.
- Advisor: Ram Rajagopal.



University of California Los Angeles, Los Angeles, CA USA

- Ph.D., Computer Science, Distributed Systems, December 2012.
- M.S., Computer science, Machine Learning, June 2008
- Advisor: Carlo Zaniolo, Awards: NSF Scholar, GSR Scholarship.



University of California Santa Barbara, Santa Barbara, CA USA

- M.A., Economics with Emphasis on business, June 2007.
- B.S., Computer Science, June 2006.
- Regents Scholarship and Dean's Honor List.

PROFESSIONAL EXPERIENCE

Facebook, Menlo Park, CA, USA

Engineering Lead

Oct 2017 - Present



- Engineering Lead and founding member for real-time machine learning at Facebook.

Uber, San Francisco, CA, USA

Science Lead

Sep 2016 - Oct 2017



U B E R

- Tech lead for applied machine learning focusing on deep learning research and applications to time-series forecasting and anomaly detection.

Yahoo! Labs, Sunnyvale, CA, USA

Sr. Research Scientist

Jan 2013 - Sep 2016



- Developed large scale models for ranking, recommendation, classification and anomaly detection used in production by millions of people.

HRL Labs, Internship, Malibu, CA, USA

Research Scientist

Jun 2012 - Sep 2012



- Developed prediction models together with an approximation for these models that work over 'Big Data' on Hadoop.

Google, Internship, Irvine, CA, USA

Software Engineer

Jun 2011 - Sep 2011



- Developed fault-tolerance and anomaly detection techniques for Google Real-Time Analytics.

Teradata, Internship, Los Angeles, CA, USA

Software Engineer

Jun 2010 - Sep 2010



- Developed a compiler that compiles Teradata UDFs into Hadoop MapReduce jobs.

Citrix Systems, Internship, Santa Barbara, CA, USA

Software Engineer

2008 and 2009 Summers



- Developed a distributed load-testing framework to test company's backend infrastructure for GoToMyPC products.

Commission Junction, Internship, Santa Barbara, CA, USA

Software Engineer

2005 and 2006 Summers



- Developed a framework for automated Customer Acceptance Tests.

- PUBLICATIONS**
- Nikolay Laptev**, Jason Yosinski, Li Erran Li, Slawek Smyl, Time-series Extreme Event Forecasting with Neural Networks at Uber, ICML 2017
- J Balasubramanian, A Soni, Y Mehdad, **N Laptev**, Online Article Ranking as a Constrained, Dynamic, Multi-Objective Optimization Problem, FLAIRS 2017
- Xiaokui Shu, **Nikolay Laptev**, Danfeng Yao, DECT: Distributed Evolving Context Tree for Understanding User Behavior Pattern Evolution, EDBT 2016 (Full Paper)
- Xiaokui Shu, **Nikolay Laptev**, Danfeng Yao, DECT: Distributed Evolving Context Tree for Understanding User Behavior Pattern Evolution, AAAI 2016 (DEMO)
- Rob Hyndman, **Nikolay Laptev**, Earo Wang, Large-Scale Unusual Time Series Detection, ICDM 2015.
- George D Montanez, Saeed Amizadeh, **Nikolay Laptev**, Inertial Hidden Markov Models: Modeling Change in Multivariate Time Series, AAAI 2015
- Nikolay Laptev**, Saeed Amizadeh, Ian Flint, Generic and Scalable Framework for Automated Time-series Anomaly Detection, KDD 2015
- Ilaria Bordino, Nicolas Kourtellis, **Nikolay Laptev**, Youssef Billawala, Stock Trade Volume Prediction with Yahoo Finance User Browsing Behavior, ICDE 2014.
- Nikolay Laptev**, Kai Zeng, Carlo Zaniolo, Very Fast Estimation for Result and Accuracy of Big Data Analytics: the EARL System, ICDE 2013.
- Nikolay Laptev**, Tsai-Ching Lu, Carlo Zaniolo, BOOT-TS: A Scalable Bootstrap for Massive Time-Series Data, NIPS 2012.
- More on **Google Scholar**.
- SELECTED TALKS**
- ISF 2017, Cairns, Australia on Time-series modeling with Neural Network at Uber.
 - Stanford 2017, Palo Alto, on Time-series special events modeling with Neural Network at Uber.
 - FLAIRS 2017, Online Article Ranking as a Constrained, Dynamic, Multi-Objective Optimization Problem
 - EDBT 2016, Bordeaux, France on DECT: Distributed Evolving Context Tree for Understanding User Behavior Pattern Evolution (talk).
 - AAAI 2016, Phoenix, Arizona on DECT: Distributed Evolving Context Tree for Understanding User Behavior Pattern Evolution (demo).
 - Georgia Tech 2015 & #lspe meetup, on Generic and Scalable Framework for Automated Time-series Anomaly Detection.
 - ICDM 2015, Atlantic City, US on Large-Scale Unusual Time Series Detection.
 - KDD 2015, Sydney, Australia on Generic and Scalable Framework for Automated Time-series Anomaly Detection.
 - ICDE 2013, Brisbane, Australia on Very Fast Estimation for Result and Accuracy of Big Data Analytics: the EARL System.
 - NIPS 2012, Lake Tahoe, Nevada, USA on A Scalable Bootstrap for Massive Time-Series Data.
 - VLDB 2012, Istanbul, Turkey on Early Accurate Results for Advanced Analytics on MapReduce.
 - ICDE 2012, Washington DC, USA on Optimization of Massive Pattern Queries by Dynamic Configuration Morphing.
- OTHER**
- Hobbies: Basketball league, open source (github: nlaptev), marathon runner.
- Languages: English, Russian, Spanish.
- Personality: A lot of enthusiasm and energy for solving difficult problems.
- REFERENCES**
- Mayur Deshpande, Google, Realtime Analytics Lead, nep@google.com
- Pekka Kostamaa, Teradata, Chief of Scientist, pekka.kostamaa@teradata.com
- Youssef Billawala, Apple, Science Manager, ybillawala@gmail.com
- Fran Bell, Uber, Sr. Manager, fran@uber.com
- Carlo Zaniolo, UCLA, Professor, zaniolo@cs.ucla.edu