

Volodymyr Lyubinet

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github.com/vlyubin

I'm a computer scientist interested in algorithms, machine learning and systems.

Work Experience

Software Engineer (Contractor), **Forethought.ai**, *Remote / SF* Jan 2018 - May 2018

- Built an MVP version of customer support ticket categorization. Researched and benchmarked various text classification approaches, resulting in a publication.
- Built infrastructure using docker swarms and various features in python.

Software Engineer, **Databricks**, *San Francisco* Jan 2016 - Jun 2017 & Jan - Apr 2015

- Worked in Scala on Databricks product built using microservices. Designed and implemented access management tool, new features for pricing and billing services.
- Wrote the first version of [Avro connector for Spark](#) (450+ stars on github).
- Implemented and benchmarked performance optimizations for Apache Spark, speeding up conversions between RDDs and dataframes [by a factor of 2](#).

Software Engineer (Intern), **LinkedIn**, *Mountain View* Jan 2014 - Apr 2014

- Improved candidate recommendations for recruiters. Extended model with features coming from recruiter search data. Implementation in Java with Hadoop MapReduce.

Software Engineer (Intern), **Facebook**, *Menlo Park* May 2013 - Aug 2013

- Implemented new features for Ads Manager in C++ and python.

Research Assistant, **UWaterloo Graphics Lab**, *Waterloo* Jan 2013 - Apr 2013

- Worked on shape synthesis: given a sample set of 2D shapes, generate a variety of new distinct shapes that have the same structure as samples.

Project Experience

- **Higgs Boson Kaggle Competition at EPFL**

In-class competition based on Higgs Boson dataset without usage of external libraries. We've built a multi-layer neural network from scratch, with final solution being a bag of neural networks. We've [placed 1st](#) in a 300+ people class.

- **Real-Time Operating System**

A real-time safety-critical OS that is used to navigate a set of trains on the train track. Entire project was built from the ground up with resulting size of ~20K LoC (mostly C).

- **AR Gesture Manipulator**

Solution that allows to change parameters of your computer (such as brightness) using gestures captured by a webcam with an AR interface. Built with custom background subtraction algorithm in OpenCV. [2nd place](#) at LauzHack hackathon.

Education

- Bachelor of Computer Science, **University of Waterloo**, 2010 - 2015
- Completed a variety of ML courses online such as cs231n and cs229, attended workshops and summer schools on computer vision and other ML topics.

Awards

Programming

- ACM ICPC World Finals 13th place (128 teams), 2015
- ACM ICPC East-Central North America Champions, 2014
- TopCoder Red Standing, top 3% (username: vlyubin, 69K total users), 2016
- IEEEExtreme grand 1st place (3000+ teams), 2017
- Distributed Google Code Jam - top 20 (24K participants), 2015
- Google Hash Code - top 10 (2800 teams), 2017

Mathematics

- Putnam competition: top 100 in 2013, top 120 in 2012, top 175 in 2011.
- National high school research contest in mathematical modeling by the Ukrainian Academy of Sciences – grand 1st place. Topic: “Rvachev Functions”, 2010
- International Math Olympiad team candidate for Ukraine (12 candidates)

Miscellaneous

- J.D. Kalbfleisch Scholarship – highest valued Waterloo scholarship for international students (14,000 CAD), 2010
- Lviv Physics and Mathematics Lyceum valedictorian (class size: 120), 2010

Talks & Presentations

- “Automated labeling of bugs & tickets using attention-based mechanisms in recurrent neural networks” paper, accepted to IEEE DSMP 2018 conference ([paper](#)).
- “Introduction to big data processing with Apache Spark” ([slides](#)) at UnitedDev conference in Minsk (700 conference attendees), 2017
- “Overview of text classification approaches” ([slides](#)) at AI&BigData Day conference in Lviv (300 conference attendees), 2018
- “Using coordinate descent to train one hidden layer neural nets” ([slides](#)) at EPFL MLO lab (semester project), 2017