Vojtech Letal

Professional Experience

Machine Learning Engineer - Blindspot.ai (Prague, Czechia)

09/2015-present

Email: hire-me@vojt.in Phone: +420775330515

- Led a team of developers working on several analytical tasks for a US-based cybersecurity startup
- Responsible for developing a real-time event-based anomaly detection platform using Apache Flink and Apache Spark
- Prototyped regression model for the Czech presidential election which confidently predicted the outcome from less than 5% of early results
- Contributed to visualization and optimization toolbox which allowed a European fast-food company to optimize its supply chain by 80 km (50%) or 1 hour (17%) per delivery route
- Worked on toolbox designed to analyze correlations between crimes and external conditions like weather using data from LAPD
- Developed custom-tailored software solutions for a variety of problems including data analysis and optimization

DS12 Resident - DataScience Inc. (Culver City, CA, USA)

summer 2016

- 1 of 9 residents selected to participate in a 12-week elite, intensive residency program
- Passed through rigorous admissions process with 2.5% acceptance rate
- Implemented recommendation system with real client data using ALS and pattern mining in Spark
- Trained churn prediction model on real client data and identified several likely causes of churn
- Designed scalable production ETL pipeline which outperformed legacy SQL-based solution 6x (20 min) and was 36x (< 1\$) cheaper to execute

R&D - Cisco Systems (Prague, Czechia)

06/2014-08/2015

- Collaborated with a team which developed state-of-the-art anomaly detection system on network traffic data
- Implemented novel Bayesian inference algorithm to estimate probability of maliciousness of domains
- Worked extensively with big data technologies such as Twitter Scalding and Apache Spark

Education

Masters degree (First-class honors)

09/2012 - 06/2015

Czech Technical University in Prague - Open Informatics - Artificial Intelligence

Bachelors degree

09/2009-06/2012

Czech Technical University in Prague - Communication, Multimedia and Electronics - Communication technology

Skills

Languages Czech (Native), English (Fluent)

Programming Python, Scala, Java SE/EE, Shell scripting, C/C++

Analytics Scikit-learn, Spark, Mathematica, TensorFlow, Matlab, R

Patents

Vojtech Letal, Tomas Pevny and Petr Somol. Discovering yet unknown malicious domains using relational data. US Patent App. 14/844,379.

Publications

Vojtech Letal, Tomas Pevny, Vaclav Smidl, and Petr Somol. Finding new malicious domains using variational bayes on large-scale computer network data. In *Advances in Approximate Bayesian Inference*, NIPS 2015 Workshop, 2015.

Activities

Rock climbing, yoga, pilates, squash, reading, traveling