Mekhti Musaev

Data Scientist/Research Engineer (Machine Learning)

Summary

Over 5 years experience in software engineering and machine learning projects. Interested in Machine Learning position.

1. Currently working as Machine Learning Engineer at CGI Suomi Oy. Previously worked as Research Assistant in Probabilistic Machine Learning Group (Aalto University) under the supervision of Professor Samuel Kaski and contributed to ELFI (Engine for Likelihood Inference) machine learning open source project using python, scikit-learn, matplotlib, GPy, scipy, numpy and jupyter notebook.
2. Was also honored to be a Teaching Assistant for the course “Machine Learning: Basic Principles” (MLBP) under supervision of Assistant Professor Alexander Jung and helped students with assignments where they used pandas, scikit-learn, numpy, scipy and matplotlib.
3. Regularly contribute to several open source projects including, but not limited to code quality, code syntax and machine learning from such companies as Google and institutions like Aalto University (Espoo, Finland).
4. Practicing data science tasks in Kaggle competitions.
5. Participated in implementing stylometry and obfuscation algorithms for computer security company.

Experience

2019-05 - present

Machine Learning Engineer

CGI Inc.

Working as Machine Learning Consultant for clients in different fields. Building and tuning data pipelines from scratch with a large amount of data (from 100 million up to 9 billion samples). Incorporating training and prediction workflows into data pipelines.

Technology stack: AWS EMR, AWS Lambda, AWS EC2, AWS Step Functions, AWS CodeBuild, AWS CodeCommit, Amazon Sagemaker, AWS SQS, AWS SNS, AWS Athena, AWS Glue, Apache Spark, Apache Kafka, Apache Zeppelin, Python (pyspark), Scala, Helium, Jenkins

2018-03 - 2018-12

Machine Learning Research Assistant

Probabilistic Machine Learning Group, Aalto University

Worked on **ELFI (Engine for Likelihood-Free Inference,** clickable) project.

Research group home page: https://research.cs.aalto.fi/pml/

Supervisor: Samuel Kaski, Professor, PI.

Technologies: jupyter notebook, scikit-learn, numpy, matplotlib, GPy, ipywidgets, IPython, pytorch

2018-09 - 2018-10

Teaching Assistant

Machine Learning for Big Data Group, Aalto University

CS-E3210 Machine Learning: Basic Principles course (clickable).

Personal Info

Address

Espoo, Finland

E-mail

mehty.musaev@gmail.com

WWW

https://musayev.me

GitHub

https://github.com/b5y

LinkedIn

https://www.linkedin.com/in/mehtimusayev/

Skills

Python, LightGBM, Linux / Mac OS, bash, Git, CI, CD, numpy, scipy, jupyter notebook, IPython, Zeppelin, scikit-learn, matplotlib, pytest, Flask, Jenkins, Jira, Confluence, Redmine, web crawling/scraping (scrapy), REST API

Proficient

PyTorch, seaborn, Scala, Hadoop, Spark, PostgreSQL, MySQL, NoSQL, mock, integration testing, TDD, gerrit

Competent

Software

PyCharm, Intellij IDEA, atom, sublime, vim, emacs

Languages

English

C2

Russian/Azerbaijani (Bilingual)

C1

Turkish

B2

German

A2

Responsibilities: helping students with assignments, explaining lectures with more details, giving more information about python, numpy, scipy, pandas and scikit-learn.
Teacher in Charge: Alex Jung, Assistant Professor of Computer Science.

2016-10 - 2017-09

Software Backend Engineer

Selectel Ltd., selectel.com
Implemented new and fixed old backend applications in Go and Python. Participated in implementing architectural solutions (following design patterns) in products. Code review.
Implemented functional and unit-tests using mocks. Found and fixed bugs during going into projects. Wrote code documentation.
Finished projects: Rewriting traffic counter from Python to Go.
Created debian packages from projects.

Technologies: OpenStack, Python, pytest, Flask, Ubuntu, Go, Jenkins, Git, bash, MySQL, PostgreSQL, Akamai, Jira, Confluence, gerrit

2015-12 - 2016-07

Research Software Engineer

Digital Security Ltd., https://dsec.ru
Implemented static code analyzer for obfuscating algorithms (intellectual property protection), stylometry (project which collects unique style of specific developer) and transpilers (converting code from JS to Python and vice versa).
Completed projects: stylometry and partly obfuscation algorithms
Open source projects which were used (all of them are clickable): **RedBaron**, **baron** and **yapf**.

Technologies: Debian, Python Internals, Git (Continuous Integration), Redmine, MongoDB

2016-04 - present

Open source projects

RedBaron (open source project from Python Code Quality Authority): Fixed bug with rendering in full syntax tree, updated TODO list with some improvement ideas, removed dead code in the project, Added at method to insert code to specific place in the syntax tree
GitHub page: https://github.com/PyCQA/redbaron
yapf (open source project from Google): Fixed bug with formatting unique style. Implemented Unit Tests.
GitHub page: https://github.com/google/yapf
ELFI (open source project from Aalto University): Added new example Lorenz model, fixed bug with plotting pairs for 1-D, fixed processing multivariate distributions, added progress bar for inference methods, added functionality to save samples for inference methods, fixed bug with shared axes, added functionality for pairwise contour plots of GP fit with more than 2 parameters, fixed bug in plot_discrepancy for more than 6 parameters.
GitHub page: https://github.com/elfi-dev/elfi

2012-03 - 2012-05

C# .NET developer (Internship)

Evrograndsoft LLC, http://cofite.com
Responsibilities: supporting closed part of website for schedulers of Russian Railways in the Northwestern Federal District.

Education

2018-01 - 2018-12

Aalto University, Machine Learning and Data Mining (Macadamia), Exchange student

Courses: Machine Learning: Basic Principles, Bayesian Data Analysis, Big Data Platforms (Scala), Concurrent Programming (Scala), Algorithmic Methods of Data Mining, Introduction to Analytics and Data Science, Machine Learning: Advanced Probabilistic Methods, Artificial Intelligence, Special Course on Supervised Learning with Large Label Sets, Special Course on Latent Variable Modeling and Bayesian Matrix Factorization, Mathematical Methods for Network Science.

2017-09 - 2018-10

ITMO University, Urban Supercomputing (Data Science), Master's Degree

The Faculty of Information Technologies and Programming.
Department of High Performance Computing

2009-09 - 2015-06

Saint Petersburg State University, Mathematics and Mechanics Faculty (Mathematics and Computer Science)

Thesis topic: Scala language implementation for Microsoft .NET on the basis of Common Compiler Infrastructure (CCI)
Research supervisor: Doctor of Engineering, Professor Vladimir O. Safonov

2008-09 - 2009-06

Saint Petersburg Presidential Physics and Mathematics Lyceum №239, high school

Studying mathematics and physics in a strong academic program.

Conferences

2016-12 — IT Global Meetup, Saint Petersburg, Russia. Speaker. RedBaron: The new Era in code manipulation

2017-02 — SPb Python Interest Group, Saint Petersburg, Russia. Speaker. Code metrics: why do we need them?

2017-03 — Python Users Berlin (PUB), Berlin, Germany. Speaker. RedBaron: The new Era in code manipulation

Courses

2014-09 - 2014-11 — Functional Programming Principles in Scala (Coursera)