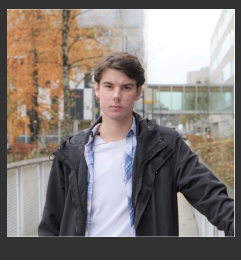

Platon Frolov

M.Sc. Data Science student

ABOUT ME

I am a graduate data scientist based in Zürich, with a background in computer science and a strong passion for mathematics. I specialize in machine learning, statistics, computer vision, optimization, and software engineering. My goal is to leverage these skills to uncover valuable insights from data and contribute meaningfully to the field of data science.

EDUCATION

M.Sc. in Data Science
ETH Zürich, Switzerland
Sep 2021 - Now

Honours B.Sc. in Philosophy
University of Twente, the Netherlands
Feb 2020 - Aug 2021

B.Sc. in Technical Computer Science
Graduated with distinction (Cum Laude)
University of Twente, the Netherlands
Sep 2018 - Aug 2021

Gymnasium+ (High school)
Bonhoeffer College Enschede, the Netherlands
Sep 2012 - Aug 2018

EXTRA CURRICULAR

Sep 2017 - East Sweden Hack - Participant

Jul 2017 - 20Creathon - Winner

Nov 2016 - Twentse Wiskunde Estafette (Math olympiad Twente) - Winner

Nov 2015 - Twentse Wiskunde Estafette (Math olympiad Twente) - Winner

LANGUAGES

- Dutch – Native
- English – Fluent
- German – Fluent
- French – Intermediate
- Russian – Intermediate

CONTACT AND LINKS

- E-mail: pfrolov@ethz.ch
- Phone: +41774245664
- Github
- Linkedin

WORK EXPERIENCE

AlterEgo Technologies AG - Software/ML Engineer Intern *Mar 2023 - Now*
- Building an online 3D virtual fitting room for online shopping
- Recognizing which cloth panels (i.e. sleeve, front, cuff) are in a sewing pattern using machine learning methods
- Modelling the sewing of clothes as a mathematical optimization problem
- Simulating sewn sewing patterns into 3D garments
- Building and designing the pipeline and data structures to go from sewing patterns to simulated garments fit on a 3D avatar

ETH Zürich, TIM Chair - Research Assistant *Feb 2022 - Mar 2023*
- Implemented and set up cognitive experiments (e.g. Tower of Hanoi) in Javascript to assist PhD students in their research
- Wrote Python scripts to process and analyze data from experiments
- Automatically generated personalized reports in Adobe Indesign to show the performance of individual participants in the cognitive experiments

University of Twente, BMS Lab - Assistant Developer *Nov 2019 - Aug 2021*
- Responsible for the development of a web tool to transcribe and annotate (interview) audio files for research purposes (Audio Playground)
- Refactored the codebase for better maintainability
- Implemented functionality to annotate speaker times in interviews and implemented storing/retrieving of audio and transcription files
- Wrote functionality to show statistics/graphics on e.g. speaking times and turns in an interview

PROJECTS

Data Science Lab (for Restor Foundation) *Sep 2022 - Jan 2023*
- Built a model to segment tree instances from drone imagery
- Using the masks from this model, calculated features for individual trees and clustered them by species
- Researched several feature generation methods (pixel-wise statistics, geometric features, spectral features and unsupervised/semi-supervised representations) and their impact on the clustering performance
- Researched different unsupervised clustering algorithms and their performance on our data

Bachelor Thesis *May 2021 - Jul 2021*
- Performed an empirical study on the sensitivity of different machine learning models to different types of perturbations in training/test data
- Designed and built a framework to evaluate models under different noise perturbations
- Wrote a paper for the Bachelor Thesis conference at the University of Twente

UTML *Feb 2021 - May 2021*
- Built a diagram drawing tool for System Design/Database courses at the University of Twente
- Gathered requirements from professors and teaching assistants from different courses and turned them into features
- Implemented features such as creating, resizing, moving, renaming and serializing objects, drawing edges, panning and zooming

TECHNICAL SKILLS

General: Machine learning, Computer Vision, Statistics, Optimization, Algorithms, Graph Theory, Software Engineering

Programming: Python, Java, PyTorch, Pandas, Numpy, OpenCV, Matplotlib, Sci-kit learn, SQL, Spark, Haskell, Linux, HTML, CSS, JavaScript, PHP

Other: AWS (S3 and Lambda), Git, Docker, Blender