Stojan Jovanović, Ph.D.

Senior Data Scientist, Analytics Engineer & AI Systems Architect



Oxfordshire, United Kingdom



stojan.jovanovic 2112 @gmail.com

About me -

As a professional with years of experience in computational & data science, I am comfortable with every part of the modern analytics workflow, from developing the first data pipelines, via model prototyping, through to Data/MLOps.

In addition, I have considerable expertise in the field of data & ML systems architecture, having designed both HPC & distributed systems, built to support AI solutions.

So far, I have worked professionally in the domains of finance, advertising and healthcare.

Skills -

git

Tensorflow

Pandas, Numpy, Scikit-Learn

Dask, Ray, Modin, Spark

DB Systems, PostgreSQL

Jupyter, Streamlit, Shiny, Plotly

dbt, DVC, Prefect

Docker, Enroot

*nix admin, systemd, bash, Ansible

HPC systems, SLURM, Torque

Rlang, tidyverse

Scala

(*)[The skill scale is from 0 (Fundamental Awareness) to 6 (Expert).]

Experience

04/20 - now Lead Data Scientist Sensyne Health Plc, Oxford, UK Introduced continuous integration for data & ML pipelines, utilizing on-prem GitLab CI as a data flow orchestrator. Spearheaded deployment of HPC facilities in the company's AI lab. Led a team of 4 people to find clinical predictors of Covid-19 disease severity from real-world EPR data, resulting in 2 publications..

 $01/20 - 04/20 \; {\rm Machine \; Learning \; Architect} \qquad \qquad {\rm Sensyne \; Health \; Plc, \; Oxford, \; UK} \\ {\rm Led \; development \; of \; ELT \; pipeline, \; standarising \; \& \; featurizing \; data} \\ {\rm from \; two \; NHS \; trusts \; for \; use \; by \; DL \; research \; teams. \; Deployed \; central \; database \; server, \; storing \; sensitive \; patient \; data \; from \; NHS \; trust \; partners. \\ {\rm Designed \; and \; deployed \; the \; AI \; lab's \; remote \; working \; infrastructure \; at \; the \; onset \; of \; Covid-19 \; pandemic.}$

 $04/19 - 12/19 \ {\rm Senior \ Machine \ Learning \ Researcher} \qquad {\rm Sensyne \ Health \ Plc, \ Oxford, \ UK}$ Patented ML solutions for risk prediction and unsupervised detection of sub-populations in heart disease patients. Co-led the design and implementation of complex ML pipeline for a large commercial project, facilitating collaboration by 3 teams of 30 data scientists.

 $05/18 - 03/19 \; {\rm Machine \; Learning \; Engineer} \qquad \qquad {\rm Adverai \; Ltd, \; Stockholm, \; Sweden}$ Designed and engineered Adverai's entire ML microservice stack. Introduced time-series prediction and anomaly detection functionality to the company's core software product.

04/17-05/18 Data Scientist $$\operatorname{Qliro}\ AB, \operatorname{Stockholm}, \operatorname{Sweden}\ Designed \ and \ built \ a \ system \ for \ scheduled \ re-training \ and \ scoring \ of \ credit \ risk \ models \ on \ top \ of \ Hadoop, \ Spark \ and \ H2O.ai, \ automating \ manual \ credit \ reserve \ reporting \ processes. \ Helpeds \ migrate \ ETL \ systems \ from \ RDBMS \ to \ the \ Hadoop \ ecosystem, \ as \ we \ expanded \ into \ new \ markets.$

04/16 - 04/17 Data Scientist Kavli Institute, Trondheim, Norway Developed a novel, latent-variable RNN to predict time series of electrical activity of rat neurons. Publication currently being prepared.

Personal Projects

SumReader A small data summary library, written as a Reader monad —> link

 ${\bf Calling Card} \quad {\bf A} \ {\bf minimalist} \ {\bf digital} \ {\bf business} \ {\bf card}, \ {\bf written} \ {\bf in} \ {\bf Javascript}.$

The business card can be found here —> link

MLHub A small ML playground web service, based on FloydHub. Built using Flask, Jinja2, Keras and Tensorflow. Hosted on Heroku.

More info found here —> link

Education

2012 - 2016 Ph.D. in Comp. Neuroscience & Computer Science Magna Cum Laude Bernstein Centre Freiburg, Freiburg im Breisgau, Germany KTH Royal Institute of Technology, Stockholm, Sweden Erasmus Mundus Joint PhD Programme

2010 - 2011 M.Sc. in Applied Mathematics & Operations Research University of Belgrade, Serbia.
 Principal subjects: stochastic calculus & graph theory

2006 - 2010 B.Sc. in Statistics, Actuarial and Financial Mathematics 9.2/10.0 GPA University of Belgrade, Serbia Principal subjects: probability theory, mathematical statistics, financial and actuarial mathematics

Invited talks and study visits

02/17 Visiting Researcher at the Institute for Advanced Study, Princeton, New Jersey

08/16 Invited to speak at the Institute for Materials Science, Los Alamos National Lab, Los Alamos, New Mexico