Ladislav Vrbsky

Data Scientist; passionate for Big Data and Artificial Intelligence (AI); MSc in Computer Science/AI; Experienced in Software Development; Curious; Multi-cultural; Wants to use modern technologies in AI and Data projects.

Lower Company Company

EXPERIENCE

• Data Scientist / Machine Learning Engineer

Jan 2019 – Present

Vibe Desenvolvimento (SW dev. company)

[Python, SQL, Shell, Spark, Hive, Sqoop, ...]

Data and Big Data tasks at a state bank Banpará, leveraging the Hadoop ecosystem and Machine Learning (ML)

- Created and managed ETL/ELT data pipelines
- Lead the transformation to being data-driven by evangelizing and educating many about Data and ML
- Proactively suggested and currently delivering concepts of valuable projects and KPIs
- o Co-administered and co-configured a Hadoop cluster
- Will leverage ML to aggregate value using data (Spark ML, TensorFlow or PyTorch)

• Software Developer - Web

Oct 2017 – Jan 2019

Vibe Desenvolvimento (SW dev. company) [Java, C#, SQL, CI/CD, JSF, JSP, AngularJS, JS, ASP.NET, SVN]
Internet banking web apps, management systems, RESTful web services for a state bank Banpará

- Developed, improved, maintained a variety of new and legacy systems (mostly back-end)
- Boosted 3x tech support speed by improving automation tool (for 1 frequent issue)
- Crushed high-impact bugs in production
- Reduced from hours to minutes solutions of some team tasks by knowledge of various systems
- o Worked in small teams, collaborated with technical requirements team
- Applied Artificial Intelligence Researcher (CAPES scholarship)

Jan 2016 – Apr 2018

Operational Research Lab (Electrical Engineering faculty lab)

[Matlab, MEX, Git]

Smart power grid communication optimization research through cell positioning - Related to MSc Thesis

- Implemented a clustering-based topology optimizer for networks w.r.t. communication delay (Open-Sourced)
- o Compared clustering algorithms and >50 k-means/model configs, resulting in MSc thesis: Clustering-driven equipment deployment planner and analyzer for wireless non-mobile networks applied to Smart Grid scenarios

• Junior Software Developer

Apr 2013 – Aug 2014

AgentFly Technologies (Commercial/university startup at Agent Technology Center)

[Java, XML, CVS]

Large-scale multi-agent project, that models and simulates air traffic control

- o Implemented event-oriented collision avoidance protocol for UAVs, a.k.a drones
- o Optimized heuristic of route generation by extrapolating the collision-based utility values
- Analyzed 4 heuristics of route generation w.r.t. computational and communication costs, and 4 other metrics

PROJECTS & PUBLICATIONS

- ICNSC 2017 (Intl. Conference): Clustering techniques for data network planning in Smart Grids:

 Determines deployment positions of Base Stations in a network. Compares clustering algorithms.
- Fraud detection in energy network: Neural Networks, Decision Trees, Fuzzy Logic, Genetic Algorithm
- Memetic algorithm for Traveling Salesman Problem: Genetic Algorithm with local search
- AI projects: Transfer learning (TensorFlow), Simple app using TF.js, Color quantization (Matlab)

SKILLS

- Languages: Python 2 yrs, SQL 2 yrs, Java 4 yrs, C# 1 yr, C/C++ 1 yr, Matlab 3 yrs, JS | Eng, Por, Cze, Ger
- Techniques: Clustering, Neural Networks, Genetic Algorithms, Decision Trees, Graphs, Probability, ...
- Interests: TensorFlow, PyTorch, SciKit-Learn, Spark, Reinforcement Learning, Computer Vision

EDUCATION

Federal University of Pará (UFPA) | GPA 3.889

Belem, PA, Brazil

MSc - Applied Computing: Artificial Intelligence

Mar 2018

- Kansas State University (KSU) | MSc period Computer Science (intl. exchange) Manhattan, KS, USA
- Czech Technical University (CTU) | BSc Computer and Information Science Prague, Czech Republic

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