

Ladislav Vrbsky

Data Scientist; passionate for Big Data and Artificial Intelligence (AI);
MSc in Computer Science/AI; Experienced in Software Development; Curious;
Multi-cultural; Seeking engaging AI projects utilizing the Hadoop ecosystem.

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EXPERIENCE

- **Data Scientist / Machine Learning Engineer** Jan 2019 – Present
Vibe Desenvolvimento (SW dev. company) [Python, SQL, Shell, Scala, Spark, Sqoop, Hive, ...]
Data and Big Data tasks at a state bank Banpará, leveraging the Hadoop ecosystem and Machine Learning (ML)
 - Created and managed ETL 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
 - Co-configured and co-administered a Hadoop cluster
 - Will leverage ML to aggregate value using data (Spark, 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
 - 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, ~~ML~~EX, 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)
 - 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
 - Implemented event-oriented collision avoidance protocol for UAVs, a.k.a drones
 - 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 2yrs, SQL 2yrs, Java 4yrs, C# 1yr, C/C++ 1yr, Matlab 3yrs, 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