Ladislav Vrbsky

+55 (91) 99388-7307
ladislav.vrbsky@gmail.com
linkedin.com/in/vrbsky
github.com/vrbsky
www.vrbsky.com
Belem, PA, Brazil

Data Scientist passionate for Machine Learning, AI, Learning and Leading; MSc in Computer Science/AI; Experienced in Software Development; Curious; Multi-cultural; Strives to learn and apply best practices in AI and Data projects.

Experience

- **Data Scientist** Jan 2019 – Present
  Vibe Desenvolvimento (SW solutions comp.) [`Python, SQL, Pandas, sklearn, Spark, Hive, Sqoop, Shell`]
  Data and Big Data tasks at a state bank Banpará, leveraging the Hadoop ecosystem and Machine Learning (ML)
  - Processed and analyzed data to drive business decisions (Python, Pandas, Scikit-learn)
  - Led transformation to being data-driven by evangelizing and educating stakeholders about Data and ML
  - Created small projects leveraging Scikit-learn ML and Spark to drive business decisions
  - Created ETL data pipelines
  - Administered and configured a Hadoop cluster

- **Software Developer - Web** Oct 2017 – Jan 2019
  Vibe Desenvolvimento (SW solutions comp.) [`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, LaTeX, 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
- **Other ML**: Transfer learning (TensorFlow), Simple app using TensorFlow.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
- **Competencies**: (Un-)Supervised ML, Probability, Statistics, Hadoop ecosystem, Presentation & Public speaking
- **Interests**: Spark, Kafka, TensorFlow 2, PyTorch, Cloud comp., Reinforcement Learning, Neural Nets | Leadership

Education

- **Federal University of Pará (UFPA)** | GPA 3.889 Belem, PA, BRA
  MSc – Applied Computing: Artificial Intelligence
- **Kansas State University (KSU)** | *MSc period – Computer Science (intl. exchange)* Manhattan, KS, USA
- **Czech Technical University (CTU)** | *BSc – Computer and Information Science* Prague, CZE