Edson Duarte

Data Scientist and Cloud Engineer



"I like being myself. Myself and nasty." Brave New World by Aldous Huxley

Technical Skills

Advanced Data Science (Python, scikit-learn, keras, tensorflow, numpy, scipy, bokeh), Data Engineering (ETL, ELT, Apache Airflow), Data Exploration (pandas, jupyter, Databricks, Apache Superset),

Intermediate Cloud Engineering (GCP, Pulumi, Terraform, Azure, AWS), GNU/Linux (Arch, Ubuntu), Microservices (Java, Python, Spring, Quarkus, Docker, Kubernetes), Stream and Batch (Apache Spark, Apache Pulsar, Dataflow), Databases (Relational, Documents and Time-series)

Experience

Professional

2019 - present Lead Data Scientist, Chapter Lead and Software Engineer, Venturus, Campinas, São Paulo, Brazil

- Worked as Lead Data Scientist in a project for a Global Leader of the Payments sector in a Data Science solution and platform to enable insights on their operations.
- Worked as Chapter Lead of Data Science helping the company nurture the culture of knowledge sharing and continuous learning of everything related to Data Disciplines.
- Worked as a Software Engineer on the development of a payment processing distributed system using the microservices architecture, while also contributing to the general architecture, the application of agile methodology and test planning and deployment.

2018 – present **Data Scientist**, *Numerai*

- Participating in the main tournament using all 50 model slots.
- Achieved a ROI of 140% during 2021 and a ROI of 75% during 2020.

2015 - 2019 Mobile Developer, Watermelon Tecnologia, Campinas, São Paulo, Brazil

- Development in apps focused on learning, routing, delivery and video conferencing solutions.
- Using MVC and MVVC architectures, dependency injection, reactive programming and many platform APIs.
- Used tools like Rx, Room, Dagger, Retrofit, Alamofire, Realm, Twillio, Google Maps.

Academic

2017 - 2019 Machine Learning Researcher, Universidade Estadual de Campinas (University of Campinas - UNICAMP), Campinas, São Paulo, Brazil

> In this Bug Triage project we used NLP and ML techiniques to help triage teams on selecting the proper tech teams for resolution of issue tickets.

Grant: Motorola Mobility, Instituto Eldorado and Funcamp (UNICAMP)

Advisors: Prof. Jacques Wainer (IC-UNICAMP) and Prof. Eduardo Valle (FEEC-UNICAMP)

2016 **Machine Learning Researcher**, *Universidade Estadual de Campinas (University of Campinas - UNICAMP)*, Campinas, São Paulo, Brazil

In this project we used NLP and ML techiniques to help triage teams on the assesment of battery related problems on mobile devices.

Grant: Motorola Mobility, Instituto Eldorado and Funcamp (UNICAMP)

Advisors: Prof. Jacques Wainer (IC-UNICAMP), Prof. Eduardo Valle (FEEC-UNICAMP) and Prof. Siome Goldstein (IC-UNICAMP)

2014 – 2016 **Machine Learning Research**, *Universidade Estadual de Campinas (University of Campinas - UNICAMP)*, Campinas, São Paulo, Brazil

In this research we studied the application of Support Vector Machines using altenate formulations and methods of hyper-parameter optimization.

Advisor: Prof. Jacques Wainer (IC-UNICAMP)

Publications

2022 A Learning-to-Rank Approach for Spare Parts Consumption in the Repair Process, *Springer, Cham*

Co-author with Daniel de Haro Moraes and Lucas Leonardo Padula https://doi.org/10.1007/978-3-031-16474-3_50

2017 Empirical comparison of cross-validation and internal metrics for tuning SVM hyperparameters, Pattern Recognition Letters

Co-author with Prof. Jacques Wainer (IC-UNICAMP) https://doi.org/10.1016/j.patrec.2017.01.007

Community Service

2013 – 2014 **Project Management**, Consultoria, Projetos e Pesquisas em Computação (CONPEC), Campinas, São Paulo, Brazil

Voluntary work managing projects

- 2014/15 **Volunteer**, *Olimpíada Brasileira de Informática (OBI)*, Campinas, São Paulo, Brazil Voluntary work monitoring the written tests
- 2013 2014 **Member of College Groups**, *Conpec, AAACEC, CACo, Núcleo*, Campinas, São Paulo, Brazil

Education

- 2013 2020 **Computer Engineering**, *Universidade Estadual de Campinas (University of Campinas UNICAMP)*, Campinas, São Paulo, Brazil
- 2013 2020 **Computer Science**, *Universidade Estadual de Campinas (University of Campinas UNICAMP)*, Campinas, São Paulo, Brazil

Languages

Portuguese Fluent Native Language

English Advanced Course at Escola de Idiomas Cultura Inglesa, 2009 – 2011

Russian Basic Course at Centro de Estudo de Línguas (CEL), UNICAMP, 2013 – 2014

Spanish Basic Course at Escola Estadual Prof. João Dias da Silveira, 2002 – 2004

Other Interests

Freedom, science fiction, Free and Open Source Software, alternative rock, Open Science, movies, politics, electronic music, secularism, artificial intelligence, sciences and philosophy.