Jose Nandez

jose.nandez.ds@gmail.com | 416.919.3334 | Toronto, ON

EDUCATION

UNIVERSITY OF ALBERTA
PhD in Physics
Jun 2015 | Edmonton, AB

UNAM
MSc in Astronomy - Summa Cum Laude
Dec 2010 | Mexico City

UNAM
BSc in Applied Mathematics - Summa Cum Laude
May 2009 | Mexico City
Minor: Computer Science

LINKS

https://www.linkedin.com/in/jose-nandez
https://github.com/JNandez
https://www.kaggle.com/jnandez

SKILLS

PROGRAMMING
Python • SQL • BASH • LaTeX
C • C++ • Scala

SUBVERSION:
Git • GitHub • BitBucket

MACHINE LEARNING:
sklearn • scipy • xgboost • lightgbm
Keras • CatBoost • H2O • TensorFlow

CLOUD ENVIRONMENTS:
Azure • DataBricks • AWS • SSH
GCP

VISUALIZATION:
PowerBI • matplotlib • seaborn

BIG DATA:
Spark • Hadoop • Hive • Pig • HBase

OS:
Windows • Linux • MacOS

DATABASES:
SQL Server • MongoDB

DATA FORMATS:
CSV • JSON • XML
PNG • PARQUET • ORC

EXPERIENCE

MAPLE LEAFS SPORTS & ENTERTAINMENT | Lead Data Scientist
May 2019 - | Toronto, ON
- Provide mentorship when developing and implementing ML models for the MLSE data science team.
- Work with Team Operations for the implementation of new Deep Learning models using Keras and TensorFlow
- Provide scientific advice to the VP of Basketball Strategy&Research.
- Manage ML projects.
- Suggest and explore novel solutions to data science/data visualization/data pipeline problems.

MAPLE LEAFS SPORTS & ENTERTAINMENT | Data Scientist
Jan 2018 - May 2019 | Toronto, ON

- Build high quality datasets (using Data Lakes) and develop data science tools to drive fan experience by means of real-time visualization, using EventHub, Stream Analytics and PowerBI
- Work with Team Operations to develop, optimize and deploy of Deep Learning models using Keras and TensorFlow.
- Conduct end-to-end analysis that includes data gathering, processing, analysis, ongoing deliverables and maintaining existing models.
- Create production pipelines for data ingestion, aggregation and modeling of mobile data using Data Factory, Blob Storage, Batch Accounts.

COMPUTE CANADA - SHARCNET | Research Scientist
Nov 2015 - Aug 2018 | London, ON

- Help to deploy big data analytics/mining tools.
- Develop plans, timelines and deliverables for the design, development, implementation, testing and deployment of big data applications.
- Help researchers to architect data collection, movement and storage for structured and unstructured data and streaming/real-time data.

AWARDS

2018	MLSE Performance Excellence Award
2013	Mary Louise Imrie Graduate Student Award
2012	Mexican Best National Astronomical Master's Thesis
2011 - 2015	CONACYT Doctoral Fellowship

SELECTED PUBLICATIONS

[1] N. Ivanova, S. Justham, J. L. Avendano Nandez, and J. C. Lombardi. Identification of the long-sought common-envelope events. *Science*, 339(6118):433–435, 2013.

[2] J. L. A. Nandez, N. Ivanova, and Jr. Lombardi, J. C. V1309 Sco—Understanding a Merger. *ApJ*, 786:39, May 2014.

[3] J. L. A. Nandez, N. Ivanova, and J. C. Jr Lombardi. Recombination energy in double white dwarf formation. *MNRAS*, 450:L39–L43, June 2015.

[4] J. L. A. Nandez and N. Ivanova. Common envelope events with low-mass giants: understanding the energy budget. *MNRAS*, 460:3992–4002, August 2016.

[5] Natalia Ivanova and Jose Nandez. Planetary Nebulae Embryo after a Common Envelope Event. *Galaxies*, 6:75, July 2018.