

Antonio Ramón Trani

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EDUCATION

UNIVERSITY OF VIRGINIA

B.S. in Mechanical Engineering

Dean's List 2015-2017

Class of 2017
Charlottesville, VA

Coursework: Mechatronics • Machine Design • Signals

SKILLS

Languages Python 3 (Pandas, NetworkX, Flask, SpaCy) • R • C++ • Javascript (jQuery, D3) • HTML/CSS • JSON • Spin

Tools Git • JIRA • VSCode • Tableau • Putty • Sublime

Cloud/DB Heroku • AWS (S3) • ElasticSearch • SQL • Apache Nifi • Kibana

Knowledge Machine Learning • Agile Development • CI/CD • Mechatronics

General Eng Solidworks • AutoCAD • Matlab • LTSpice • LabView

Soft Skills Bilingual Communication (Spanish and English) • Mentorship • Public Speaking

EXPERIENCE

CONSULTANT - DATA SCIENCE

Deloitte, L.L.C.

Oct 2018 - Present
Washington, DC.

- Led case support for 6 DoT and DHS financial fraud investigations utilizing machine learning of email data, ranging 30K-1M+ data points (Python, ElasticSearch, Nifi)
- Deployed network, NER, and translation processors for identifying social relationships of interest, and topics for investigation handling 2M+ data points (NetworkX, SpaCy)
- Automated ETL and graph analysis pipelines of email investigation web app for scaling from 6 to 20 investigations (Python, ElasticSearch, Nifi)
- Led development of financial portfolio web-dashboard handling 300K+ rows for DoD cost assessment lab analysts (Javascript, SQLite)

ENGINEERING ANALYST

U.S. Naval Air Systems Command

July 2017 - Sept 2018
Patuxent River, MD

- Automated data archiving, post-processing of sonar data (Python, PostgreSQL)
- Modelled military engagements for US Navy using Monte-Carlo simulations
- Programmed flight scheduling to create probability of detection over time graphs

TRANSPORTATION ENGINEERING INTERN

Virginia Tech, Department of Civil & Environmental Engineering

May 2015 - Aug 2015
Blacksburg, VA

- Visualized aircraft flight patterns and noise distribution (Matlab)
- Developed proposal for new runway scheme of O'Hare airport to mitigate noise

ENGINEERING TECHNICIAN

Leidos

March 2014 - Feb 2015
Blacksburg, VA

- Developed tool to grade roadwork construction and generate reports (Matlab)
- Designed database GUI for engineering technicians (C#)

TRANSPORTATION ENGINEERING INTERN

Virginia Tech, Department of Civil & Environmental Engineering

May 2013 - Aug 2013
Blacksburg, VA

- Evaluated costs/benefits of satellite tracking of commercial flights
- Analyzed commercial flight paths and strategies for fuel savings (Matlab)

PROJECTS

DATA ANALYTICS COURSE INSTRUCTOR

April 2020 - Present

- Created and instructed courses in Python 101, Webscraping in Python, R 101, Text Analytics in R, and SQLite 101 for Deloitte practitioners

MECHATRONICS LAB PROJECTS

Jan 2016 - May 2017

- Designed and constructed pachinko machine, raster printer, and video games
- Developed CAD (Solidworks), rapidly prototyped mechanical and electrical components, created circuit plans (LTSpice) and developed microcontroller code