

# Dragos Ilas

Data scientist with a math and programming background. MS in Math, worked as a software engineer for 2 years, data scientist for 2 years. Fast learner.

## EXPERIENCE

### **American Water**, Camden, NJ — *Data Scientist / AI Researcher*

2018-2020

Developed and implemented Artificial Intelligence solutions in the water utility space

Created a help-desk solution for autonomous redirection of tickets based on user-submitted text using Natural Language Processing methods

Implemented risk scores for database log data using anomaly detection algorithms including isolation forests

Collected and cleaned data for an AWS analytics dashboard

### **NYC Data Science Academy**, NY — *Data Science Fellow*

2018

Immersive 12-week bootcamp on data science and machine learning

Created a classifier to identify domestic violence from police reports, partnered with John Jay's National Network for Safe Communities

Scraped data from 100,000 Reddit posts, used NLP and sentiment analysis

Built a R Shiny/leaflet interactive dashboard exploring meteorite attributes by filters

### **SPAR Solutions**, Atlanta, GA — *Software Engineer*

2014-2017

Designed and implemented customization solutions for clients in Customer Relations Management, using Salesforce/Apex, Java, SQL, HTML, JavaScript, both front-end and back-end

### *Graduate and Undergraduate Research*

2011-2013

Developed a model for simulating growth of silicon nanowires based on the Kinetic Monte Carlo method; implemented a MATLAB code for application of this model; performed 2D & 3D simulations

Studied the secondary folding of RNA; wrote a program to calculate the edit distance between the tree representations of two RNA molecules

## EDUCATION

### **University of Tennessee-Knoxville** — *MS Math*

2013

### **Georgia Institute of Technology**, Atlanta — *BS Applied Math*

2011

Philadelphia area

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## SKILLS

**Python:** numpy, scipy, pandas, sklearn, pytorch

**R:** dplyr, ggplot2, shiny, leaflet

### **Machine Learning:**

Linear/Logistic Regression, Regularization, Random Forests, XGBoost, SVM, Clustering, PCA, Neural Networks, Convolutional NNs, Recurrent NNs, NLP

**Big Data:** AWS, Hadoop, Hive, Spark

SQL, Java, C++, Matlab

Scrapy, Selenium, Flask

**Tools:** Jupyter, Sagemaker, MySQL, Git, RStudio

## AWARDS/ACTIVITIES

Highest score at Georgia Tech in Putnam Mathematical Competition, 2008

Participated in the US Mathematical Olympiad, 2003 and 2004

Interests: Technology Development, Artificial Intelligence, Astrodynamics

## US CITIZEN