

Dan Salo

Multimedia Full Stack Data Scientist
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WORK EXPERIENCE

- Data Scientist, Proofpoint, Durham, NC 2019 - Present
- Creating new NLP and CV solutions to improve cybersecurity classifier performance on social media content.
- Senior Data Scientist, Automated Insights, Durham, NC 2018 - 2019
- Data Scientist 2017 - 2018
- Programmed a contextual synonym suggester using word2vec and Python. Deployed on the AWS stack. Used by dozens of Wordsmith users every day.
 - Designed and prototyped a dynamic insights recommendation system for BI dashboards in concert with software engineers, designer, and product manager.

EDUCATION

- M.S. in Engineering, Duke University 2017
- Advisors: Dr. Nimmi Ramanujam (BME), Dr. Larry Carin (ECE)
- B.Sc. in Biomedical Engineering, NC State University 2014
- Bioinstrumentation Concentration. Minor in Piano Performance.

STUDENT PROJECTS

- Deep Learning for Threat Detection, Duke University, Dr. Larry Carin 2016 - 2017
- Successfully implemented an object detection algorithm for threat detection in x-ray scans of airplane luggage using Python and TensorFlow.
 - Collaborated with engineers at Rapiscan and Smiths Detection.
- Diagnostic Cancer Imaging, Duke University, Dr. Nimmi Ramanujam 2014 - 2016
- Designed a multispectral imaging system to predict malignancy of breast cancer margins. Analysis and Monte-Carlo ray tracing in Matlab and Python.
 - Achieved an AUC of 0.72 with a random forest implementation.

TECHNICAL SKILLS

- Programming Languages: Python (sklearn, TensorFlow, PyTorch, pymc3), Javascript (Node.js, React.js), R, Bash
- Software Frameworks: Version Control (git, svn), Containers (Docker), Databases (SQL, NoSQL, Graph), AWS Stack (S3, DynamoDB, ECR, ECS, EC2)
- Machine Learning: Neural networks, optimization, clustering, recommenders, tree-based methods, reinforcement learning
- Statistical Methods: Hierarchical Bayesian inference, time series analysis, dimensionality reduction, matrix factorization, multivariate analysis

OUTREACH

- High School Tutor, Student U, Durham, NC. 2015 - 2017
- FIRST Lego Robotics Coach, Student U, Durham, NC. 2014 - 2015
- Engineering Ambassador, NC State University. 2011 - 2013

HONORS

- Automated Insights Hackathon 3rd place (2018), NSF GRFP Honorable Mention (2016), James B. Duke Fellowship (2014), NC State Goldwater Nomination (2013), NC State Caldwell Fellow (2010)