

# Dan Salo

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EDUCATION	M.S. in Engineering, Duke University, GPA: 3.80 Advisor: Dr. Nimmi Ramanujam (BME), Dr. Larry Carin (ECE)	2016
	B.Sc. in Biomedical Engineering, NC State University, GPA: 3.94 Bioinstrumentation Concentration. Minor in Piano Performance.	2014
WORK EXPERIENCE	<p>Data Scientist, Automated Insights 2017 - Pres.</p> <ul style="list-style-type: none"><li>Adapting and implementing machine/deep learning solutions to improve the generation of personalized content from data in the Wordsmith web app.</li><li>Text CNNs, LSTMs, Sentence Vectors, N-Gram Models, SVMs, Topic Modeling</li></ul>	
PROJECTS	<p>Deep Learning for Threat Detection, Duke University, Dr. Larry Carin 2016 - 2017</p> <ul style="list-style-type: none"><li>Created a semi-supervised, multi-view region-based CNN algorithm for threat detection in x-ray scans of airplane luggage using Python and TensorFlow.</li><li>First implementation of handgun detection in x-ray images, will deploy in 2018.</li></ul>	
	<p>Diagnostic Cancer Imaging, Duke University, Dr. Nimmi Ramanujam 2014 - 2016</p> <ul style="list-style-type: none"><li>Designed a multispectral imaging system to predict malignancy of breast cancer margins. Analysis and Monte-Carlo ray tracing in Matlab and <i>Python</i>.</li><li>Achieved an AUC of 0.72 with a random forest implementation.</li></ul>	
	<p>Home Health Monitoring, NC State University, Dr. Andrew DiMeo 2013 - 2014</p> <ul style="list-style-type: none"><li>Invented and produced a wearable device to detect pulmonary edema in patients with congestive heart failure. Embedded system filtering in C++.</li><li>Earned first place at joint NC State/UNC Senior Design Competition.</li></ul>	
TECHNICAL SKILLS	<p>Programming Languages: Python (TensorFlow), R, <math>\text{\LaTeX}</math>, Bash, HTML5, CSS, C/C++</p> <p>Machine Learning: Neural networks, support vector machines, semi-supervised learning, stochastic optimization, clustering, tree-based methods</p> <p>Statistical Methods: Bayesian inference, regression models, hierarchical models, hypothesis testing, dimensionality reduction, matrix factorizations</p> <p>Selected Coursework: Linear Systems, Digital Signal Processing, Numerical Linear Algebra, Vector Spaces and Applications, Bayesian Statistics, Multivariate Analysis</p>	
OUTREACH	High School Tutor, Student U, Durham, NC.	2015 - Pres.
	FIRST Lego Robotics Coach, Student U, Durham, NC.	2014 - 2015
	Engineering Ambassador, NC State University.	2011 - 2013
HONORS	NSF GRFP Honorable Mention (2016), James B. Duke Fellowship (2014), NC State Goldwater Nomination (2013), NC State Caldwell Fellow (2010)	