

Reuben Feinman
reuben.feinman@nyu.edu

- Education:** **New York University**
Ph.D., Neural Science, expected May 2022
- Thesis advisor: Brenden Lake
 - Relevant coursework:
 - *Neuroscience*: Math Tools for Neural and Cognitive Science, Cellular Neuroscience, Neuroanatomy, Sensory & Motor Systems, Behavioral & Cognitive Neuroscience
- Brown University**
Sc.B. with Honors, Applied Mathematics, May 2015
- Thesis: A deep belief network approach to learning depth from optical flow
 - Thesis advisors: Thomas Serre & Stuart Geman
 - GPA: 3.9/4.0
 - Relevant coursework:
 - *Computer Science*: Accelerated Intro to Computer Science, Intro to Computer Systems, Discrete Structures & Probability, Intro to Artificial Intelligence
 - *Mathematics*: Multivariable Calculus, Linear Algebra, Methods of Applied Math I&II, Statistical Inference, Information Theory, Game Theory, Recent Applications of Probability & Statistics
 - *Neuroscience*: Computational Vision
- Work Experience:** **Symantec Corporation**
Machine Learning Engineer
Center for Advanced Machine Learning
July 2015 – June 2017
- Worked as the only non-PhD in a team of 10, with the consulting of ML pioneer Russ Salakhutdinov
 - Led an R&D effort that resulted in the dramatic improvement of known and unknown malware detection rates on 100+ million endpoints worldwide
 - Developed a ML model that caught and blocked 22 million attempts of the global and infamous “WannaCry” ransomware attack
- Publications & Patents:**
- Feinman, R. & Lake, B.M. (2018). Learning inductive biases with simple neural networks. *arXiv preprint arXiv:1802.02745*.
 - Feinman, R., Curtin, R.R., Shintre, S., Gardner, A.B. (2017). Detecting adversarial samples from artifacts. *arXiv preprint arXiv:1703.00410*.
 - Papernot, N., Goodfellow, I., Sheatsley, R., Feinman, R., McDaniel, P. (2016). Cleverhans v1.0.0: an adversarial machine learning library. *arXiv preprint arXiv:1610.00768*.
 - Feinman, R., Echaz, J., Gardner, A.B. (2016). Systems and methods for trichotomous malware classification. *US Patent App. No. 15/356,526*.
 - Feinman, R., Gardner, A.B., Parikh, J. (2016). Efficient feature selection. *US Patent App. No. 15/282,645*.
 - Feinman, R., Parikh, J. (2016). Systems and methods for detecting malware based on event dependencies. *US Patent App. No. 15/188,950*.
- Honors & Awards:**
- Henry Mitchell McCracken Award, NYU GSAS, September 2017
 - CTO Recognition Award, Symantec Corporation, May 2016
 - Sigma Xi Honor Society, Brown Chapter Sigma Xi, May 2015
 - Concentration Honors, Brown University, May 2015
- Press:**
- R&D featured in Security Week article “Symantec Adds Machine Learning to Endpoint Security Lineup.” <http://www.securityweek.com/symantec-adds-machine-learning-endpoint-security-lineup>
 - R&D featured in eWeek article “Symantec Adds Deep Learning to Anti-Malware Tools to detect Zero-Days.” <http://www.eweek.com/security/symantec-adds-deep-learning-to-anti-malware-tools-to-detect-zero-days>