Reuben Feinman
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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., Curtin, R.R, Shintre, S., Gardner, A.B. (submitted). Detecting adversarial samples from artifacts. *Preprint available on arXiv:1703.00410.*
- Papernot, N., Goodfellow, I., Sheatsley, R., Feinman, R., McDaniel, P. (2016). Cleverhans v1.0.0: an adversarial machine learning library. *Technical report available on arXiv:1610.00768.*
- Feinman, R., Echauz, 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