Alexander Alemi

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SCHOLAR: [google scholar](#)
CV: [Curriculum Vitae](#)
WORK: [google ai](#)
GITHUB: [alexalemi](#)
BLOG: [thephysicsvirtuosi.com](#) (0.5M pageviews)
PHYSICS.SE: [alemi](#) (second most popular answer)

EDUCATION & EXPERIENCE

2018-	SENIOR RESEARCH SCIENTIST at Google.
2016-2018	SOFTWARE ENGINEER and Machine Learning Researcher at Google.
2015-2016	POSTDOC at Disney Research, Boston.
2015	PHD in Theoretical Physics, Cornell University. Advisor: Jim Sethna
2015	RESEARCH INTERNSHIP for Google.
2014	CONSULTANT for Disney Research.
2014	INTERNSHIP at Disney Research, Boston. Advisor: Jonathan Yedidia
2012	MS in Physics, Cornell University.
2009	BS in Physics, California Institute of Technology, with honors.

EXPERTISE

Information Theory • Machine Learning • Neural Networks • Bayesian Statistics • Numerical Methods • Python • Condensed Matter Physics

PROGRAMMING

Daily: Python • TensorFlow • (Numpy/Scipy/Matplotlib)

Proficient: LaTeX • Mathematica • Go • Julia • Java • Javascript • Lua • MongoDB • HTML • CSS • C • SQL • Linux • Git • Vim

RESEARCH

Current: Information Theory and Deep Learning: Attempting to understand and improve deep networks by understanding the intersection of information theory and deep learning.

Past: Graph Embeddings • Image Classification • Classification of the arXiv • Zombie Modelling • Structure of Neural Networks • Smooth Robot Trajectory Optimization • OpenKIM.org Developer • Nonlinear Elasticity of Graphene • Stock Market Structure • Defect Modelling in Atomic Sheets • Elastic Model of Skin Cancer • Nanoelectromechanical Oscillators • Near-field Heat Transfer • Venus' Missing Moon

Ask Me About: Inverting the Game of Life • Solving Crosswords without Clues • Portal Physics • Effectiveness of Speeding • Sounds of Coins • Racquetball Ping Sound • Battleship • Twitter Compression