

# Ninad Khargonkar

<https://ninception.github.io/>

ninad.khargonkar@gmail.com

Phone: (+1) 413-345-9601

## EDUCATION

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### University of Massachusetts, Amherst

Amherst, MA

M.S in Computer Science — GPA: 4.0/4.0

Expected 2019

### Indian Institute of Technology, Kanpur

Kanpur, India

B.S in Mathematics and Scientific Computing — GPA: 8.4/10.0

2013 – 2017

## EXPERIENCE

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### Programming Assistant

Amherst, MA

University of Massachusetts, Amherst

Sep–Nov 2017

- Worked for Prof. Leontine Alkema on a simulation project on statistical indicators for family planning.
- Assisted in coding the simulation exercises and providing computational assistance in R programming.

### Mitacs Globalink Research Internship

Winnipeg, Canada

University of Manitoba, Winnipeg

Summer 2016

- Implemented scale down sampling on graphs using different random walks and analyzed their performance.
- Statistical graph models were used to test significance of network substructures by simulations.
- Worked on a side project on simulating team performance in Uefa Euro'16 and submitted report to JSM 2017.

## PROJECTS

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### Modelling Uncertainty in Deep Learning

Amherst, MA

University of Massachusetts, Amherst

Nov–Dec 2017

- Analyzed the problem of modelling uncertainty in the results from the outputs/scores of a deep neural network.
- Coded a neural network in Keras (python) for the uncertainty value calculation on cifar-10 and mnist datasets.

### Depth from Monocular Images

Amherst, MA

University of Massachusetts, Amherst

Nov–Dec 2017

- Studied the problem of depth prediction in monocular images through an unsupervised approach.
- Stereo image pairs were used during training to learn a disparity and hence the depth map.

### Hindi Part of Speech tagging

Amherst, MA

University of Massachusetts, Amherst

Nov–Dec 2017

- Developed a part of speech (POS) tagger for Hindi by learning a word level translation between Hindi and English using mono-lingual word embeddings and parallel corpora.
- No supervised pos information was provided and the tagger improved the performance of proxy tasks.

### Stochastic Variational Inference

Kanpur, India

IIT-Kanpur

Jan–Apr 2017

- Conducted literature survey of Variational Inference and its stochastic extension – SVI.
- Implemented SVI on a Latent Dirichlet Allocation model for document-topic categorization in Python.

## TECHNICAL SKILLS

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**Programming:** Python, C/C++, R, Matlab

**Others:** Git, LaTeX, Vim, Linux, HTML/CSS

## RELEVANT COURSES

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**Graduate:** Machine Learning, Optimization, Neural Networks, Bayesian Learning, Information Theory.

**Undergrad:** Data Structures & Algorithms, Probability & Statistics, Numerical Computation, Linear Algebra.

## SCHOLASTIC AWARDS

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- Recipient of Inspire scholarship awarded by the Dept. of Science & Technology (Govt. of India).
- Awarded Mitacs Globalink scholarship for summer research internship in Canada in 2016.