

# Meet P. Vadera

☎ 413-522-9548 || ✉ mvadera@cs.umass.edu

## Education

---

2017-Present	University of Massachusetts Amherst	MS/PhD (Computer Science)	GPA: 4.0/4.0
2012-2016	Indian Institute of Technology Gandhinagar	B.Tech. (Mechanical Engineering)*	GPA: 8.29/10

\*Minor in Computer Science and Engineering.

## Select Publications

---

- **Vadera M.**, Jalaian B., and Marlin, B. Generalized Bayesian Posterior Expectation Distillation for Deep Neural Networks. In *UAI (2020)*
- **Vadera M.**, Shukla S., Jalaian B., and Marlin B. Assessing the Adversarial Robustness of Monte Carlo and Distillation Methods for Deep Bayesian Neural Network Classification. In *AAAI Workshop on SafeAI (2020)*
- Holtsclaw C., **Vadera M.**, and Marlin, B. Towards Joint Segmentation and Active Learning for Block-Structured Data Streams. In *KDD Workshop on Data Collection, Curation, and Labeling (DCCL) for Mining and Learning (2019)* (Best Paper Award)
- **Vadera M.**, and Marlin, B. Assessing the Robustness of Bayesian Dark Knowledge to Posterior Uncertainty. In *ICML Workshop on Uncertainty & Robustness in Deep Learning (2019)*

## Work Experience

---

### Kronos Inc.

*Data Science Intern*

*June '18- August '18*

- Developed deep learning models to automatically predict late-edit risk in timecards. This leads to significant time saving for managers involved in time-keeping task due to automated sorting of high-edit-risk timecards
- Created automatic punch labeling system using deep learning consistent with the existing rule based system. This provides an alternate to the more complicated system for accelerating internal research studies
- Worked on an independent R&D project to develop neural network based models for volume forecaster at parity with existing production models

### Innovaccer Inc.

*Member of Technical Staff*

*June '16- July '17*

- Worked on Big data stack for developing *Datashop*- the company's flagship product
- Designed the software architecture, and developed modules of Data Quality Tool and Healthcare measures computation as core modules for the platform. This helped clients build and run a large set of measures through a plug-and-play framework

## Projects

---

### Posterior expectation distillation for Bayesian neural networks

*Advisor: Prof. Benjamin Marlin*

*January '19 - Present*

- Currently working on compressing Bayesian posterior expectations for deep neural networks to develop computationally efficient approximation methods

### Deep learning architectures for activity detection from sensor data

*Advisor: Prof. Benjamin Marlin*

*January '18 - December '18*

- Developed fusion-based and auxiliary supervision-based architectures to boost the performance of deep learning models on the task of smoking detection beyond state-of-the-art baselines

## Technical Skills

---

Python, Scala, C, MATLAB, R, PyTorch, Keras, Weka, Apache Spark, MySQL, Elasticsearch, MongoDB

## Awards

---

NSF travel award (IEEE/ACM CHASE '19), and best paper award (KDD Workshop '19)