Akhilesh Gotmare

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EDUCATION

EPFL
MSc in Computer Science
Expected Feb 2019 | Lausanne, CH
Cum. GPA: 5.22/6

IIT GANDHINAGAR
BTech in Electrical Engineering
Apr 2016 | Gandhinagar, IN
Minor in Computer Science and Engineering
Dean's List (Semesters I, II, III, IV, VI, VII)
Cum. GPA: 8.99 / 10

LINKS

Google Scholar:// Akhilesh Gotmare
Github:// akhileshgotmare
LinkedIn:// akhilesh-gotmare

COURSEWORK

GRADUATE
Machine Learning
Applied Data Analysis
Convex Optimization
Advanced Algorithms
Maths of Data
Distributed Algorithms

UNDERGRADUATE
Operating Systems
Algorithms
Computational Photography
Algorithms for Data Science
Data Management
Digital Signal Processing

SKILLS

PROGRAMMING
Python • Shell • C • Matlab
SQL • Weka • LaTeX

LIBRARIES
sklearn • numpy • scipy
pandas • networkx • tensorflow
keras • opencv • matplotlib

POSITIONS HELD

Primary Licensee, TEDxIITGandhinagar
Academic Secretary, Student Council IITGN
Student Guide, IITGN

RECENT PUBLICATIONS

[1] A. Gotmare, N. S. Keskar, C. Xiong, and R. Socher. Using Mode Connectivity for Loss Landscape Analysis. Workshop on Modern Trends in Nonconvex Optimization for Machine Learning, ICML 2018, Stockholm, Sweden

[2] A. Gotmare*, V. Thomas*, J. Brea, and M. Jaggi. Decoupling Backpropagation using Constrained Optimization Methods. Workshop on Efficient Credit Assignment in Deep Learning and Deep Reinforcement Learning, ICML 2018, Stockholm, Sweden

Full list here.

EXPERIENCE

SALESFORCE RESEARCH (METAMIND) | DL Research Intern
Supervised by Dr. Nitish Keskar, Dr. Caiming Xiong and Dr. Richard Socher.
Palo Alto, US | Apr 2018 - present

- Studied mode connectivity as a tool for neural network loss landscape analysis, intermediate results published at an ICML 2018 workshop
- Currently working on building efficient language modelling architectures using the transformer decoder (attention-only modules)

MACHINE LEARNING LAB, EPFL | Research Scholars' Program
Supervised by Prof. Martin Jaggi
Lausanne, CH | Sept 2016 - Feb 2018

- Studied scalable alternatives to backpropagation for training neural networks
- Implemented and compared algorithms inspired by the alternating direction method of multipliers (ADMM) for neural network training with benchmark techniques like the adam, sgd, sgd with momentum
- Currently working on ADMM inspired model parallel approaches to deep learning, intermediate results published at an ICML 2018 workshop

DATA SCIENCE LAB, UNIV. OF NOTRE DAME | REU Summer Intern
Supervised by Prof. Nitesh Chawla
Notre Dame, US | May 2015 - July 2015

- Studied the performance of deep learning techniques for the classification of real world imbalanced datasets
- Studied the data pre-processing techniques like oversampling or SMOTE, undersampling and Tomek-links reduction and their impact on classification performance with neural network models

COURSE PROJECTS

Recommender system using collaborative filtering techniques	Machine Learning
Analysis of Amazon reviews for Swiss Products	Applied Data Analysis
Study of multiplicative weight updates for solving linear programs	Convex Optimization
Prototype designing of a DBMS for the placement cell at IIT GN	Data Management

AWARDS

MSc Research Scholarship at Machine Learning lab, EPFL	2017
Cash Award for Journal Publication, IIT GN	2015 & 2017
Discipline Topper Academic Excellence Scholarship, IIT GN	2013
High School Scholarship by Maharashtra State ranked 22nd/700,000	2007