Prakhar **Verma**

MASTER'S STUDENT · MACHINE LEARNING, DATA SCIENCE, AND ARTIFICIAL INTELLIGENCE · AALTO UNIVERSITY

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Summary

I am a high energy, confident professional with an infectious enthusiasm for technology. Prior to my masters, I have worked in an R&D department of a multi-national company, a start-up, a public sector company, and an NGO. I possess a track record of good grades, certifications, projects, and presentations.

My research interests are, but not limited to, computer vision, deep learning, reinforcement learning, GANs and their application in various fields.

Education

Aalto University   *Finland*
M.S. IN MACHINE LEARNING, DATA SCIENCE, AND ARTIFICIAL INTELLIGENCE   *2019 - Present*

Dehradun Institute of Technology   *India*
B.TECH IN INFORMATION TECHNOLOGY (FIRST DIVISION WITH HONORS)   *2012 - 2016*

Experience

Aalto University   *Espoo, Finland*
RESEARCH ASSISTANT   *April 2020 - Present*

  I am a member of the Aalto Machine Learning research group headed by Prof. Arno Solin.

TomTom   *Pune, India*
SOFTWARE ENGINEER(R&D)   *July 2016 - August 2019*

  I was a member of the R&D team which is responsible to devise, develop, and bring into production innovative new technologies. Majorly, my work revolved around machine learning(semantic segmentation), image processing, and automation with a focus on revolutionizing map data.

Internship

TomTom   *Pune, India*
INTERN (BACHELOR THESIS)   *January 2016 - June 2016*
- Developed a toolkit for on-field map-making
- Thesis was nominated as the most innovative thesis at the university

Instano Technologies   *Bangalore, India*
SOFTWARE INTERN   *May 2015 - June 2015*
- I was able to explore the entrepreneur inside me
- Handled both the backend and frontend development of the product

Oil and Natural Gas   *Dehradun, India*
TRAINEE   *December 2014 - January 2015*
- Worked on the development of an "Entry Pass Verification System"
- It helps employees in obtaining the entry pass for their vehicles and security officer in identifying the vehicles

ETASHA Society   *New Delhi, India*
INTERN   *June 2014 - July 2014*
- Worked on the testing and roll-out of CRM tool.
- Handled the data migration and conducted various training sessions

Teaching

Deep Learning (CS-E4070)   *Finland*
AALTO UNIVERSITY   *Spring 2020*
- One of the teaching assistant for the course
- My responsibilities include assignment creation, supervision along with the professor.

Projects

Spectral Graph Analysis

AALTO UNIVERSITY   *November 2019*

The project aims to perform graph partitioning with the use of Spectral Clustering on social network graphs. The goal is to minimize the number of cuts while maintaining cluster size balance.
More Details : Github Repository

Bayesian Statistics Global Warming

AALTO UNIVERSITY   *November 2019*

Today, one of the biggest threat to the society is global warming. Sea level rise is the immediate result of global warming as it melts the ice sheets and expands the water volume. Goal of the project is to examine how much the sea level rise affects the coastal cities in Finland.
More details : Github Repository

Speaker Adaptation

AALTO UNIVERSITY   *November 2019*

Speaker adaptation uses various techniques to adapt a speech recognition system to user-specific acoustic features. The recognition performance of such systems has not reached that of speaker-dependent ones, though recent development in the processes has proven to improve the recognition results. In this project, various speaker adaptation techniques based on various training methods and their respective results measured by performance levels (word error rate percentage) are presented.
More details : Research Paper

More Projects

GITHUB

https://github.com/prakharverma

Presentations

12th International Conference on Machine Vision   *Amsterdam*

PRESENTED : M.A.G.E.C -MACHINE ASSISTED GEOMETRY EXTRACTION AND CREATION   *November 2019*

Google Developers Group 2018   *India*

PRESENTED : TENSORFLOW CASE STUDY   *April 2018*

GeoSpatial World Forum 2018   *India*

PRESENTED : FEATURE EXTRACTION FROM SATELLITE IMAGERY   *January 2018*

Accomplishments

- Awarded "Face of TomTom 2018" for actively representing TomTom in conferences and promoting the brand.

- Winner of TomTom "Innovation Day 2018", presented an artificial intelligence plugin which bridges the gap between machines and cartographers.

- Mentor at "TomTom External Hackathon 2018".

- "Electronic Health Record" idea was selected in Top 10 at a national event, "India Ideathon 2015".

Publications

- Fuzail Palnak, Kshitij Nikhal, Prakhar Verma, Ravi Panchani, and Sagar Rohankar "M.A.G.E.C: machine assisted geometry extraction and creation", Proc. SPIE 11433, Twelfth International Conference on Machine Vision (ICMV 2019), 114332Z (31 January 2020); https://doi.org/10.1117/12.2559438