

T.K. Prashanth

Resumé

#465 Hazel Street, Unit 1B, Waterloo, Ontario

Canada N2L3P7

+15197299365

✉ prashanth.tk95@gmail.com

📄 LinkedIn: <https://in.linkedin.com/in/prashanthtk>

Homepage: <https://prashanthtk.github.io>

Github handle: <https://github.com/PrashanthTk>

Objective

- Cognitive and Computational Neuroscience based topics in Artificial Intelligence like Machine and Deep Learning, Human Computer Interaction and Computer Vision fascinates me the most. I advocate the usage of technology to contribute to the improvement of human life and solve urban development problems like brain image analysis for example.

Publications (Conferences)

- Prashanth T.K., Syed Munawwar Quadri, Ramesh Jain, Siripen Pongpaichet, Ahmed Esmin, "TargetZIKA: Disaster Situation Detection and Risk Preparedness For ZIKA Virus", The 10th International Conference on Ubi-media Computing and Workshops , U-Media 2017.
- Tarun Sharma, Susheel Suresh, Prashanth T.K., Dinkar Sitaram., Subramaniam V., Nirupama M., "Towards Quantifying the Amount of Uncollected Garbage through Image Analysis", The Indian Conference on Computer Vision, Graphics and Image Processing, India. ICVGIP-2016.

Projects

SpoonSnap: Intelligent Food Logger

- Guides: Prof. Ramesh Jain, Prof. Dinkar Sitaram & Prof. Subramaniam K.V
- Built a an intelligent mobile food logging framework which uses CNNs for Deep Learning based food image analysis and recommendations.

TargetZIKA: Disaster Situation Detection and Risk Preparedness For ZIKA Virus

- Guides: Dr. Ramesh Jain, Dr. Ahmed Esmin, Dr. Siripen Pongpaichet and Mengfan Tang

Developed a Disaster Situation detecting framework using microreports and aggregate heterogeneous multimedia datastreams to combat ZIKA in Brazil.

Geospatial Interpolation Analytics Operator in Eventshop

- Guides: Dr. Ramesh Jain, Dr. Siripen Pongpaichet and Mengfan Tang

Developed the Datasource Interpolation operator for increasing the accuracy of the geospatial interpolation operator of the Eventshop tool, by increasing the number of spectral features learnt using Matlab and Java.

Swacch-Bharat Image Analysis

- Guides: Dr. Dinkar Sitaram and Dr. K.V.Subramaniam

Developed an image analysis pipeline to estimate the metric volume of complex structured objects (garbage dumps), using AlexNet, Structure from Motion and 3D Reconstruction. This project is aimed at the Swacch Bharat campaign in India.

Hierarchical Data Analysis using Multilevel Modeling

- Guides: Dr. Kavi Mahesh (Dean of Research at PES University), Dr. I.K. Ravichandra Rao and Dr. K.N. Seetharamu

Enhanced prediction analytics of hierarchically structured data using Multilevel Regression in R via the HLM libraries.

IFlowDebugger

- Guides: Mr. Sripad J., Product Architect, SAP Cloud Platform Integration, SAP Labs India Pvt. Ltd.

Built a stand-alone tool for the SAP HANA Cloud Platform Integration team to efficiently debug integration flows in any enterprise scenario.

Ontological Analysis using Property-Graph Modeling

- Guide: Prof. Channa Bankapur

Modeling Road traffic data from the traffic dataset of United Kingdom (2012) using a graph database engine , Neo4j.

Research Experience

Internships

Corporate Intern, SAP Labs India. 2017 .

Research Intern, Social Life Networks Lab, Donald Bren Hall ICS, University of California, Irvine. 2016..

Research Intern, Cloud Computing and Big Data Lab, PESIT, Bangalore. 2015.

Research Intern, Knowledge Analytics and Ontological Engineering (KAnOE), PESIT, Bangalore. 2015..

Summer Research Intern, Student Nokia Developer, PESIT, Bangalore. 2014..

Positions held:

Teaching Assistant, Design of Functional Modeling (Instructor: Prof. Ian Goldberg) , Computer Science, University of Waterloo.

Judge, #code 2016 , Hackathon sponsored by IEEE and Microsoft.

Member of Technical Staff, Microsoft Innovation Lab .

Captain and Manager, P.E.S. University Football Team.

Captain and Manager, P.E.S. University Hockey Team.

Student Committee Head, Infini International Sports Fest.

Areas of Interest

- Big Data Analytics: Artificial Intelligence, Machine Learning, Deep Learning, (Image, Speech and NLP). Computational Neuroscience, Cognitive aspects of intelligence and neural networks
- Human Computer Interaction, Computer Vision and Computer Graphics
- Web Development and Information Security
- Urban Development

Education

- **Masters in Mathematics, Computer Science, University of Waterloo**, Ontario, Canada. 2017 - present
- **B.E. Computer Science & Engineering, PESIT (affiliated to VTU Belgaum)**, Bangalore, India. 2013-17 *CGPA: 9.32*

Skills

Programming Languages Python, Java, C, PHP, SQL, Scala, Ruby on Rails, Matlab, R, Javascript, Node, C#

DBs and Other AsterixDB, MySQL, MongoDB, postgres, Neo4j, Hadoop, Apache Spark, Apache Camel

Involvements, Awards and Achievements

- As a captain, I have led both my football and hockey teams to victory in many State-Level Inter-University tournaments in India.
- Volunteered at IYM India to teach basic science, uses of computers and technology to underprivileged children.
- Have actively participated in organising Hackathons and Workshops for Student Nokia Developer, Microsoft Innovation Labs and the Computer Science Department of PESIT and am the Core Organiser for events like Ayana, HashCode, Incito - Ideathon etc. I recently was the MC for NASA Space Apps organized by SAP Labs India. I also hosted SAP's IXP Summit 2017 in Bangalore.
- Won the Samarpana India 10km Run - 2016.

Languages

- English, Kannada, Hindi, Kannada. French and Japanese (basic level)