DIPANJAN DUTTA

Phone: (438) 979-6882
dipanjan.dutta@mail.mcgill.ca

2220 Claremont Apt. 308
Montreal, QC H3Z2P8

I am currently a master's student at McGill University. My research interests are:

- Applications of Machine Learning and Artificial Intelligence in computer games, healthcare and cyber security.
- Pattern Recognition.
- Application of ML algorithms in creating social impact.

EDUCATION

MSc McGill University, Computer Science — Expected August 2019
Thesis: Floating point optimization of neural networks during training
Advisor: Clark Verbrugge
Ongoing
Current CGPA: 3.4/4

B. Tech Maulana Abul Kalam Azad University of Technology, Computer Science and Engineering — June 2015
CGPA: 8.63/10

RESEARCH EXPERIENCE

McGill University., Montreal, Canada — 2018 - Present
Master's student, Advisor: Prof. Clark Verbrugge

- JIT-like framework for adaptive reduction of precision of weights during training of neural networks
- Using stochastic bandits to learn the distribution of reduction of precision of each weight

Infosys Ltd., Bengaluru, India — 2016 to 2017
Systems Engineer, Manager: Suman Roy

- Predictive analysis of QoS parameters like resolution time of IT maintenance tickets from ticket summary feature space using Fuzzy C-means clustering and Linear Regression

Infosys Ltd., Bengaluru, India — 2015 to 2016
Systems Engineer, Manager: Kiran Kumar Kaipa

- Development of a platform aimed at providing predictive analysis on large datasets using Hadoop MapReduce and R

Infosys Ltd., Bengaluru, India 2015
Systems Engineer, Manager: Pramod Prakash Panda

- Development of a model to evaluate and analyze performance of students in campus placement exams across the country

TEACHING EXPERIENCE

Teaching Assistant, *McGill University* Fall 2018
COMP521: Modern Computer Games

Teaching Assistant, *McGill University* Winter 2018
COMP360: Algorithm Design

Teaching Assistant, *McGill University* Winter 2018
COMP251: Algorithms and Data Structures

PUBLICATIONS

Conference Papers

(Peer-Reviewed)

Roy, S., Muni, D. P., Bhattacharya, A., Dutta, D., & Budhiraja, N. Fuzzy QoS modeling of IT maintenance tickets. *2017 IEEE International Conference on Web Services (ICWS)*, 2017, pp. 476-483.

Roy, S., Dutta, D., Muni, D. P. & Bhattacharya, A. Fuzzy Prediction of QoS for IT maintenance tickets. *Proceedings of the Fourth ACM IKDD Conferences on Data Sciences*. 2017.

Posters

Campbell, J., Dutta, D., Verbrugge, C. Towards an adaptive fine-grained framework to optimize neural networks. *NSERC-CRSNG COmputing Hardware for Emerging Intelligent Sensing Applications (COHESA) Network AGM*. 2018.

PROFESSIONAL TRAINING

Infosys Ltd., Systems Engineer, Presales Analytics, March 2017-June 2017

- Created a prototype for a retail client to predict the confidence of return of a purchase order

Infosys Ltd., Systems Engineer, Corporate Technologies, June 2016-March 2017

- Development of a model to predict resolution time of IT maintenance tickets using Fuzzy C-Means clustering on summary text feature space of tickets
- The work was accepted at ICWS 2017

Infosys Ltd., Systems Engineer, Corporate Technologies, June 2016-March 2017

- Development of a model to predict resolution time of IT maintenance tickets using Fuzzy C-Means clustering on summary text feature space of tickets
- The work was accepted at ICWS 2017

Infosys Ltd., Systems Engineer, Infosys Information Platform, August 2015-June 2016

- Development of a platform to predict the rank ordering of classification algorithms on large datasets from a representative sample

Microsoft Technology Associate, Microsoft, 2014
Microsoft Technology Associate in Database Fundamentals certification.

Microsoft Certified Professional, Microsoft, 2014

LANGUAGES

Bengali: Native Language

English: Advanced Speaking, Listening, Read and Writing

Hindi: Intermediate Writing and Reading, Advanced Listening and Speaking

COMPUTER SKILLS

Programming: Python, R, C, C++, Java, C# in Unity, J2EE, SQL, MATLAB (image processing)

Applications: Unity3D, ImageMagick, Tableau, Eclipse

Platforms: Tensorflow, Theano, PyTorch

OTHER

Interests: Playing new and upcoming computer games, reading, listening to music, movie trivia buff, learning new technologies and programming languages.
Citizenship: India

REFERENCES

Prof. Clark Verbrugge, Associate Professor
Department of Computer Science
McGill University
School of Computer Science, McGill University
McConnell Engineering Bldg., Rm. 318
3480 University Street
Montréal, Québec, Canada
H3A 0E9
Phone: (514) 398-2411
Email: clump@cs.mcgill.ca

Dr. Suman Roy, Director
Data Science R&D
Optum, UnitedHealth Group
Phone: +919886023203
Email: suman.roy@optum.com