# Sunil Aryal, PhD

Lecturer (full-time continuing since Jan 2019) School of IT, Faculty of Science, Engineering & Built Environment Deakin University, Geelong Waurn Ponds Campus

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## Summary

- · Nine years of teaching experience: 6 years in UG and PG levels (Australia) and 3 years in high school (Nepal)
- Investigator in research grants totalling in excess of AUD 1.9 million.
- Masters by Research and PhD in Computer Science 25+ publications, most of them in CORE A\*/A ranked venues
- Four years of industry experience: 2 years in software development and 2 years in applied machine learning
- Supervised 6 final year capstone projects & 8 master's major/minor theses, currently supervising 2 PhD theses
- Nominated by students for the Faculty of IT Teaching Award at Monash University, Clayton School of IT (2015)
- Received Dean's Award for Outstanding Academic Achievement by University of Southern Queensland (USQ) and ISACA Prize by Information Systems Audit and Control Association (ISACA) Brisbane Chapter.

# **Teaching**

Programming, Data Structure and Algorithm, Data Mining, Machine Learning, IT Placement, Research & Development in IT, Professional Skills in IT, Capstone Projects

## Research Interests

Data Mining and Machine Learning — Practical and Robust Data Mining, Similarity Measures, Classification, Clustering, Anomaly Detection, Ensemble-based and Random Methods, Learning from small subsamples of data, Explainable AI, Autonomous Systems, and Health Informatics

# Appointments Held

2016-2019	Lecturer (full-time), Federation University, Mt Helen, Australia
2013-2016	Lecturer (sessional), ATMC (Federation University), Melbourne, Australia
2014-2015	Data Engineer (part-time), Gyde Inc., Melbourne, Australia
2014-2015	Teaching Associate (sessional), Monash University, Clayton, Australia
2014-2015	Research Assistant (casual), Federation University, Churchill, Australia
2013-2013	Software Developer (casual), Monash University, Clayton, Australia
2012-2013	Research Assistant (casual), Monash University, Churchill, Australia
2009-2010	Research Student (full-time), Katholieke University, Leuven, Belgium
2008-2009	Software Developer (full-time), Ingenico Asia Pacific International, Warriewood, Australia
2006-2006	IT Officer (full-time), Nepal Bank Limited, Damauli, Nepal
2002-2005	Computer Teacher (full-time), Kathmandu Don Bosco Higher Secondary School, Kathmandu, Nepal

#### Education

2020	Graduate Certificate in Higher Education Learning & Teaching, Deakin University, Australia
2017	РнD, Monash University, Australia
2012	MIT(Research), Monash University, Australia
2008	MIT(Coursework), University of Southern Queensland, Australia
2005	BIT, Purbanchal University, Nepal

#### **Publications**

The list of my academic publications are available in my Google Scholar and DBLP pages.

## Grants, Honours & Awards

- Basic Science Research grant (Principal Investigator) USD 100,000 (≈ AUD 140,000), funded by the Air Force Office of Scientific Research (AFOSR) Asian Office of Aerospace Research and Development (AOARD) and Office of Naval Research (ONR) Global, USA
- AFOSR-DST Australia Autonomy Initiative grant (Co-Investigator) AUD 373,199, funded by the Air Force Office of Scientific Research (AFOSR) and Defence Science Technology (DST) Group Australia
- Operation Research Network (ORNet) grant (Co-Investigator) AUD 97,000, funded by Defence Science Technology (DST) Group Australia
- Defence Science Institute (DSI) AI for decision making initiative grant (Principal Investigator) AUD 20,000, funded by the Office of National Intelligence (ONI) Australia
- Peer-Reviewed ECR Support Scheme (PRESS2020) seed grant (Principal Investigator) AUD 5,000, supported by the Faculty of Science, Engineering and Built Environment, Deakin University
- Research grant (Co-Investigator) AUD 1.28 million, funded by WorkSafe, WorkWell Improvement Fund (Round 2)
- ECR startup grant (Principal Investigator) AUD 10,000, offered by the School of IT, Deakin University
- Student travel award from Asian Information Retrieval Society (AIRS) and Monash Institute of Graduate Research (MIGR) to attend AIRS conference in Brisbane, Australia
- Student travel award from Alberta Innovates Centre for Machine Learning (AICML) and Monash Institute of Graduate Research (MIGR) to attend IEEE ICDM in Shenzhen, China
- <sup>2013</sup> Australian Postgraduate Award (APA) for PhD at Monash University
- Best Poster Award at the Faculty of IT higher degrees by research conference, Monash University
- Monash Postgraduate Publication Award (PPA)
- Research student stipend for MIT(Research) from a research grant funded by US Air Force Research Laboratory awarded to Prof. Kai Ming Ting
- Research student scholarship by a research grant funded by European Research Council awarded to Dr. Jan Ramon
- Dean's award for outstanding academic achievement by University of Southern Queensland (USQ)
- 2007-2008 Academic scholarships during MIT(Coursework) study at USQ
- 2006 ISACA prize by Information Systems Audit and Control Association (ISACA) Brisbane Chapter
- 2001-2005 Outstanding student full tuition fee waiver scholarship to study BIT

#### Academic Service

- $_{\mbox{\scriptsize 2020-}}$  Co-Deputy Director Bachelor of IT, Deakin University, School of IT
- Member Course Leadership Team, Master of IT, Deakin University, School of IT
- Member School Marketing and Student Experience Committee, Deakin University, School of IT Recognition of Prior Learning (RPL) Assessor - Bachelor of IT, Deakin University, School of IT
- 2018-2019 ECR Representative School Research Committee, Federation University, School of Science, Engineering and IT

### Professional Affiliation & Service

- Professional Member of Australian Computer Society
  Professional Member of IEEE Computer Society
  Professional Member of IEEE Young Professionals
- Treasurer IEEE Computational Intelligence Society (IEEE-CIS) Victoria Chapter
  PC Member Conferences such as IJCAI, AAAI, ECML/PKDD, PAKDD and ICONIP
  Journal Reviewer Journal of Artificial Intelligence Research, IEEE Intelligent Systems