

### Submission Data for 2020-2021 CORE conference Ranking process IEEE International Joint Conference on Neural Networks

Brijesh Verma, Marley Vellasco

#### **Conference Details**

#### Conference

Title: IEEE International Joint Conference on Neural Networks

Acronym: IJCNN

Rank: A

### **Requested Rank**

Rank: A\*

#### **Recent Years**

### **Proceedings Publishing Style**

Proceedings Publishing: other

Link to most recent proceedings: https://ieeexplore.ieee.org/xpl/conhome/9200848/proceeding Further details: IJCNN Proceedings are published by IEEE. All proceedings are available via IEEE Explore.

Proceedings contain both oral papers and poster papers.

Please note that acceptance rate in Section 2 is given for oral and poster papers. This form didn't allow to include only oral papers

acceptance rates.

Acceptance rate for oral papers in 2020 was: 30% Acceptance rate for oral papers in 2019 was: 36%

### **Most Recent Years**

# **Most Recent Year**

Year: 2019

URL: https://www.ijcnn.org/assets/docs/ijcnn2019-program-Jun29-largefont-v2(1).pdf

Location: Budapest, Hungary Papers submitted: 1532 Papers published: 801 Acceptance rate: 52

Source for numbers: https://www.ijcnn.org/assets/docs/ijcnn2019-program-Jun29-largefont-v2(1).pdf

### **General Chairs**

Name: Chrisina Jayne

Affiliation: Oxford Brooks University, Oxford UK

Gender: F H Index: 15

GScholar url: https://scholar.google.co.uk/citations?user=pDo5nIIAAAAJ&hl=en&oi=ao

DBLP url: https://dblp.org/pid/04/9946.html

## **Program Chairs**

Name: Plamen P Angelov

Affiliation: Lancaster University, UK

Gender: M H Index: 53

 $GS cholar \ url: \ https://scholar.google.com/citations?user=CCW8PwkAAAAJ\&hl=en$ 

DBLP url: https://dblp.org/pid/16/6228.html

#### Second Most Recent Year

Year: 2018

URL: http://www.ecomp.poli.br/~wcci2018/

Location: Rio de Janeiro, Brazil Papers submitted: 1163

Papers published: 764 Acceptance rate: 66

Source for numbers: https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8489251

#### **General Chairs**

Name: Teresa B. Ludermir

Affiliation: Universidade Federal de Pernambuco, Brazil

Gender: F H Index: 34

GScholar url: https://scholar.google.com/citations?user=w-tKJOwAAAAJ&hl=en

DBLP url: https://dblp.org/pid/00/6226.html

## **Program Chairs**

Name: Jose Principe

Affiliation: University of Florida, USA

Gender: M H Index: 87

GScholar url: https://scholar.google.com/citations?user=GkpvilQAAAAJ&hl=en

DBLP url: https://dblp.org/pid/p/JoseCPrincipe.html

#### **Third Most Recent Year**

Year: 2017

URL: https://ewh.ieee.org/conf/ijcnn/2017/ijcnn-2017.pdf

Location: Anchorage, USA Papers submitted: 933 Papers published: 621 Acceptance rate: 67

Source for numbers: https://ewh.ieee.org/conf/ijcnn/2017/ijcnn-2017.pdf

# **General Chairs**

Name: Yoonsuck Choe

Affiliation: Texas A&M University, USA

Gender: M H Index: 22

GScholar url: https://scholar.google.com/citations?user=nFb\_T4wAAAAJ&hl=en

DBLP url: https://dblp.org/pid/81/4331.html

### **Program Chairs**

Name: Barbara Hammer

Affiliation: Bielefeld University, Germany

Gender: F H Index: 42

GScholar url: https://scholar.google.com/citations?user=1d30xaUAAAAJ&hl=en

DBLP url: https://dblp.org/pid/h/BarbaraHammer.html

#### **Policies**

Chair Selection: Chairs are selected based on their research track records and international professional standing in the areas of neural networks/computational intelligence.

Policy name: IEEE code of ethics

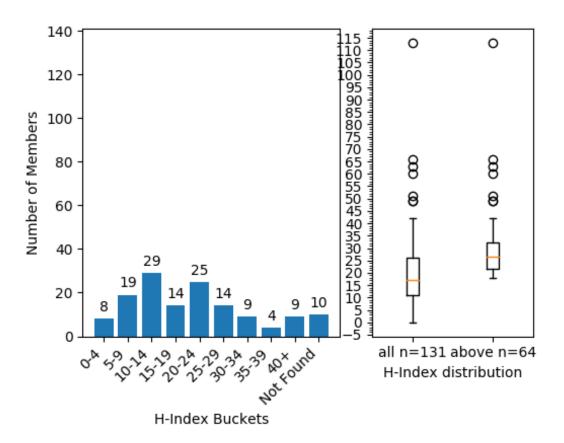
Policy url: https://www.ieee.org/about/corporate/governance/p7-8.html

### (Senior) Program Committee

Link to (S)pc: https://www.ijcnn.org/assets/docs/ijcnn2019-program-Jun29-largefont-v2(1).pdf File: http://portal.core.edu.au/core/media/conf\_submissions\_spc\_file/ijcnn2019pc\_00EqPWl.txt

H-index plot: http://portal.core.edu.au/core/media/conf\_submissions\_hindex\_plots/hindex\_buckets\_1416.png

Information Contained within this graph is derived using the Elsevier Scopus Database 2021.



# **Data and Metrics**

# **Google Scholar Metrics**

 $Sub-category\ url:\ https://scholar.google.com.au/citations?view_op=top\_venues\&hl=en\&vq=eng\_artificialintelligence\\ Position\ in\ sub-category:\ 20+$ 

Image of top 20: http://portal.core.edu.au/core/media/changes\_h5/higherrank1416\_gscholar\_minh5.png

	Publication	h5-index	h5-median
1.	International Conference on Learning Representations	203	359
2.	Neural Information Processing Systems	<u>198</u>	377
3.	International Conference on Machine Learning (ICML)	<u>171</u>	309
4.	AAAI Conference on Artificial Intelligence	<u>126</u>	183
5.	Expert Systems with Applications	<u>111</u>	152
6.	IEEE Transactions On Systems, Man And Cybernetics Part B, Cybernetics	<u>111</u>	150
7.	IEEE Transactions on Neural Networks and Learning Systems	<u>107</u>	146
8.	Neurocomputing	<u>100</u>	143
9.	Applied Soft Computing	<u>96</u>	123
10.	International Joint Conference on Artificial Intelligence (IJCAI)	<u>95</u>	140
11.	IEEE Transactions on Fuzzy Systems	<u>87</u>	117
12.	Knowledge-Based Systems	<u>85</u>	121
13.	The Journal of Machine Learning Research	<u>82</u>	153
14.	Neural Computing and Applications	<u>67</u>	98
15.	Neural Networks	<u>64</u>	92
16.	International Conference on Artificial Intelligence and Statistics	<u>57</u>	89
17.	Engineering Applications of Artificial Intelligence	<u>57</u>	78
18.	Robotics and Autonomous Systems	<u>56</u>	87
19.	Conference on Learning Theory (COLT)	<u>54</u>	80
20.	Journal of Intelligent & Fuzzy Systems	<u>50</u>	79

h5-index for this conference: 46

### **ACM Metrics**

Not Sponsored by ACM

# **Aminer Rank**

Aminer rank: 16

Aminer name: International Joint Conference on Neural Networks

Acronym / shortname: IJCNN

h-5 index: 46 CCF level: C THU level: B

Top Aminer Cites: http://portal.core.edu.au/core/media/conf\_submissions\_citations/higherrank1416\_aminer\_top\_cite.pdf

# **Other Rankings**

 $URL: \verb|https://www.scimagojr.com/journalrank.php?| category=1702 \& area=1700 \& type=p \& order=h \& ord=desc \& year=2019 | type=p \& order=h \& or$ 

Description: h-index 66 Ranked at number 4 in SCimago

Rank: 4

 $URL: {\tt https://www.guide2research.com/conference/ijcnn-2019-2}$ 

Description: Listed as TOP conference under Conference ranking and metrics.

Rank: Top conference

Conferences in area: IJCNN NIPS

# **Top People Publishing Here**

name: Professor Tom Gedeon

justification: ARC College of Experts Citations: 8440, h-index=45; i10-index= 160 Professor of Computer Science at Australian National

University Web: https://cecs.anu.edu.au/people/tom-gedeon

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
2	5	0	0	0

Attendance: OFTEN

name: Professor Jacek Zurada

justification: Fellow IEEE Citations=14634; h-index=43; i10-index= 146

Professor of Electrical and Computer Engineering at University of Louisville, USA Web: http://ci.louisville.edu/zurada/He was publishing regularly some time ago, now he publishes less but almost always attends as invited speakers/organiser.

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
0	1	0	0	1

Attendance: OFTEN

name: Professor Nikola Kasabov

justification: Fellow of the Royal Society of New Zealand; Fellow of the Institute of Electrical and Electronic Engineers (IEEE);

Citations=17108; h-index=60; i10-index= 278;

Professor at Auckland Univ. of Technology, New Zealand

Web: https://www.aut.ac.nz/research/professors-listing/nikola-kasabov

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
1	1	2	0	3

Attendance: ALWAYS

name: Professor Paul J. Werbos

justification: Paul is one of the pioneers of neural network field. He is known for discovery of Backpropagation algorithm which is basic algorithm for neural networks/deep learning. He has won many awards such as IEEE Neural Network Pioneer Award (1995).

Now Paul publishes less but almost always attends IJCNN as an invited/guest speaker or in some other roles. Web:

https://en.wikipedia.org/wiki/Paul\_Werbos

Paper counts:

- 1					
Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:	l
0	0	1	0	0	l

Attendance: ALWAYS

name: Professor Chin-Teng Lin

justification: Fellow IEEE; Citations= 24640, h-index=70;i10-index=313;

Professor at University of Technology Sydney.

Web: https://profiles.uts.edu.au/chin-teng.lin

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
2	0	1	1	2

Attendance: ALWAYS

name: Professor Robert Kozma

justification: Fellow IEEE; Fellow INNS; Professor at University of Memphis, USA

web: https://en.wikipedia.org/wiki/Robert\_Kozma

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
2	0	3	2	2

Attendance: ALWAYS

name: Professor Hussein A. Abbass

justification: Fellow IEEE; Citations: 9259; h-index=45;i10-index=168;

Professor at University of New South Wales, Canberra, Australia Web: http://www.husseinabbass.net/

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
1	2	2	1	0

Attendance: OFTEN

name: Professor Junbin Gao

justification: Citations=5477; h-index=37;i10-index= 114;

Professor at University of Sydney Web:

Paper counts:

•				
Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
3	1	2	1	5

Attendance: ALWAYS name: Professor Xin Yao

justification: Fellow IEEE; Citations=53789; h-index= 103; i10-index=534; 2020 IEEE Frank Rosenblatt Award; Web of Science Highly Cited Award;

Professor at Birmingham Uni (UK) and SUSTech (China) web: https://www.cs.bham.ac.uk/~xin/web:

https://faculty.sustech.edu.cn/xiny/en/

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
1	1	0	1	0

Attendance: ALWAYS

name: Professor Marimuthu Palaniswami

justification: Fellow IEEE; Citations=26117; h-index=61; i10-index=264

Professor of Electrical Engineering at Melbourne Uni Web: https://people.eng.unimelb.edu.au/palani/

Paper counts:

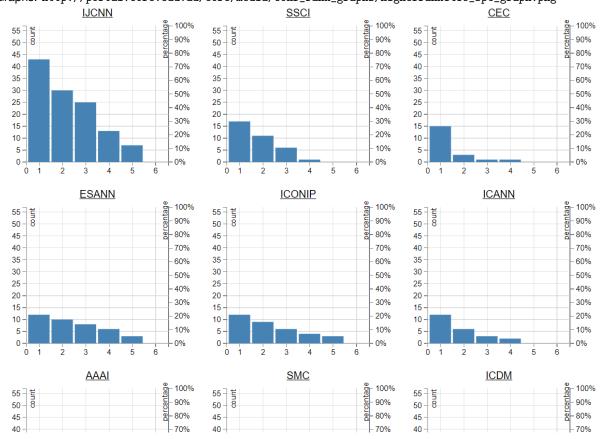
Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
0	0	0	1	1

Attendance: SOMETIMES

## Where People Publish

### **Top (Senior) Program Committee Members**

Generated Report Name: conf\_submissions\_top\_spc/higherrank1416\_top\_spc.csv WPP Report: http://portal.core.edu.au/core/media/conf\_rank\_report/higherrank1416\_spc\_report.txt Graphs: http://portal.core.edu.au/core/media/conf\_rank\_graphs/higherrank1416\_spc\_graph.png



Reference item: \\ Ranking order is first by number of the above people publishing in the venue, then by number of their publications, then by number of years with at least one publication from these people.

1. IEEE International Joint Conference on Neural Network (IJCNN)

This conference was published at 219 times by 43 of 57 experts in the last 5 years.

The experts that publish at this conference are: Luca Oneto(6), Roberto Tagliaferri(2), Carlo Sansone(1), Ajith Abraham(1), Erol Gelenbe(4), Angelo Cangelosi(6), Leonid I. Perlovsky(3), Plamen Parvanov Angelov(10), Jinde Cao(2), Shirui Pan(9), Amir Hussain(2), Lipo Wang(1), Alessandro E. P. Villa(3), Bernardete Ribeiro(8), Manuel Roveri(4), Massimo Panella(4), Paolo Gastaldo(1), Jennie Si(2), Minho Lee(7), Teresa Bernarda Ludermir(8), Saibal Mukhopadhyay(6), Stefan Wermter(24), Bart Kosko(2), Vitoantonio Bevilacqua(6), Akira Hirose(3), Wei-Chang Yeh(6), Vernica Boln-Canedo(3), Donald C. Wunsch(12), Alfredo Vellido(1), Alessio Micheli(2), Ali A. Minai(7), Alessandro Sperduti(5), Paulo J. G. Lisboa(2), Stefano Squartini(13), Jan Faigl(3), Robi Polikar(6), Jos David Martn-Guerrero(1), Johan A. K. Suykens(9), Haibo He(19), Kaizhu Huang(2), Francesco Carlo Morabito(5), Elena Marchiori(1), Pter rdi(1)

In 2015, there were 50 publications by 25 experts: Luca Oneto, Roberto Tagliaferri, Massimo Panella, Vernica Boln-Canedo, Donald C. Wunsch, Alfredo Vellido, Ali A. Minai, Leonid I. Perlovsky, Plamen Parvanov Angelov, Ajith Abraham, Alessandro E. P. Villa, Bernardete Ribeiro, Stefano Squartini, Wei-Chang Yeh, Paolo Gastaldo, Robi Polikar, Jennie Si, Minho Lee, Teresa Bernarda Ludermir, Johan A. K. Suykens, Stefan Wermter, Haibo He, Kaizhu Huang, Francesco Carlo Morabito, Vitoantonio Bevilacqua

In 2016, there were 39 publications by 22 experts: Stefan Wermter, Wei-Chang Yeh, Donald C. Wunsch, Erol Gelenbe, Ali A. Minai, Leonid I. Perlovsky, Plamen Parvanov Angelov, Jinde Cao, Shirui Pan, Alessandro E. P. Villa, Bernardete Ribeiro, Manuel Roveri, Stefano Squartini, Massimo Panella, Robi Polikar, Minho Lee, Saibal Mukhopadhyay, Johan A. K. Suykens, Angelo Cangelosi, Haibo He, Francesco Carlo Morabito, Akira Hirose In 2017, there were 43 publications by 25 experts: Luca Oneto, Shirui Pan, Vernica Boln-Canedo, Paulo J. G. Lisboa, Donald C. Wunsch, Erol Gelenbe, Ali A. Minai, Angelo Cangelosi, Leonid I. Perlovsky, Alessandro Sperduti, Plamen Parvanov Angelov, Lipo Wang, Manuel Roveri, Stefano Squartini, Jan Faigl, Robi Polikar, Minho Lee, Saibal Mukhopadhyay, Johan A. K. Suykens, Stefan Wermter, Haibo He, Francesco Carlo Morabito, Bart Kosko, Vitoantonio Bevilacqua, Pter rdi

In 2018, there were 45 publications by 18 experts: Bernardete Ribeiro, Manuel Roveri, Stefano Squartini, Massimo Panella, Robi Polikar, Jennie Si, Minho Lee, Donald C. Wunsch, Teresa Bernarda Ludermir, Alessio Micheli, Stefan Wermter, Haibo He, Angelo Cangelosi, Alessandro Sperduti, Shirui Pan, Ali A. Minai, Vitoantonio Bevilacqua, Akira Hirose

In 2019, there were 42 publications by 28 experts: Luca Oneto, Vitoantonio Bevilacqua, Wei-Chang Yeh, Carlo Sansone, Alessandro Sperduti, Donald C. Wunsch, Jos David Martn-Guerrero, Stefano Squartini, Plamen Parvanov Angelov, Angelo Cangelosi, Manuel Roveri, Jinde Cao, Shirui Pan, Erol Gelenbe, Amir Hussain, Alessandro E. P. Villa, Paulo J. G. Lisboa, Ali A. Minai, Robi Polikar, Minho Lee, Teresa Bernarda Ludermir, Saibal Mukhopadhyay, Stefan Wermter, Haibo He, Kaizhu Huang, Francesco Carlo Morabito, Elena Marchiori, Akira Hirose

43 out of the 57 experts published at this conference in 1 or more years 30 out of the 57 experts published at this conference in 2 or more years 25 out of the 57 experts published at this conference in 3 or more years 13 out of the 57 experts published at this conference in 4 or more years 7 out of the 57 experts published at this conference in 5 or more years

### **Top People Report**

Not providing Top People Report

### Other Information

# **Comparator Comparison**

## Comparator

Advances in Neural Information Processing Systems (was NIPS)

Explanation as to why conference is superior to comparator:

H5 index of NIPS is higher than H5 index of IJCNN. However, we believe H5 index is not important quality measure for conferences. NIPS has high H5 because it has open access proceedings which has nothing to do with quality of conference. The quality of conference should be measured based on measures such as quality of review process, quality of program committee, quality of keynote/plenary speakers, quality of organising committee, quality of professional bodies organising the conference, quality of participants, quality of publication (e.g. proceedings), quality of submissions, quality of venues, etc. The comparison of IJCNN with NIPS based on above criteria shows that the overall quality of IJCNN is higher than NIPS. Detailed comparison is shown below:

- 1.Quality of review process for IJCNN seems better than NIPS. According to available information for NIPS, NIPS authors are invited to become program committee members and reviewers. IJCNN doesn't invite authors to PC instead PC is formed before the conference and consists of well-known neural network researchers.
- 2.Quality of submissions for iJCNN seems better than NIPS. NIPS receives huge number of multiple submissions (e.g. information available suggests that many authors submit more than 10 papers and in 2019, there were 75 papers from one single institute). No such thing is in IJCNN.
- 3.Selecting just few papers for oral presentations at NIPS out of 6000 papers suggests low quality submissions and multiple submissions. In 2019, many even junior researchers have multiple papers accepted (e.g. 12 papers by one junior researcher) and 5 institutes have 375 papers (each 75 papers, all 5 are companies). IJCNN never had so many papers from one institute or from one author. IJCNN invites pioneers as keynote speakers and high quality of normal papers are selected based on 3-5 reviewers. The high-quality oral presentations from large number of institutes/authors and keynote speeches by pioneers in the field make IJCNN a better-quality conference.

  4.Quality of NIPS program and organising committees seems lower than the quality of IJCNN program and organising committees because NIPS committees consist of mainly people from companies and mainly junior researchers from USA and Canada. IJCNN committees consist of top neural network researchers from academia and from around the world.

- 5.IJCNN is run by top international professional organisations INNS and IEEE where NIPS is run by very small private board headed by same person for last 15-20 years.
- 6.IJCNN is held around the world and attracts diverse researchers from many universities/countries. NIPS seems more like a local conference mainly for US companies. NIPS authors/papers mainly come from 4-5 local companies and few universities. It is being held in Canada/USA.
- 7.Many pioneers of neural networks are involved in IJCNN organising/program committees. Many IJCNN keynote/plenary speakers are pioneers of neural networks. No such thing is in NIPS.
- 8.IJCNN publishes acceptance rates (combined oral and poster papers) in IEEE proceedings (very transparent process), however acceptance rates for NIPS are not available on https://nips.cc/Conferences/2020 or in proceedings(

https://proceedings.neurips.cc/paper/2020). Data used for NIPS in this form is from random github website. IJCNNâĂŹs combined acceptance rate is higher than NIPS but lower acceptance rate doesn't always mean better conference. IJCNN's acceptance rate for oral presentation papers in 2020 was: 30%.

Link to comparator report:

http://portal.core.edu.au/core/media/conference\_submission\_2020/Data\_Comparator\_for\_1416\_528.pdf

## Comparator

International Conference on Machine Learning

Explanation as to why conference is superior to comparator:

H5 index of ICML is higher than H5 index of IJCNN, however as we said in NIPS section above that this is not important quality measure for conferences. H5 index is high because of open access conference proceedings.

Please look important criteria other than H5 index as we mentioned in NIPS section. We just provide one example below which shows that IJCNN's quality is much higher than ICML's quality and overall IJCNN is a better quality conference.

ICML 2020 Keynote Speakers (see https://icml.cc/virtual/2020/events/Invited%20Talk): only 3 speakers and all are with extremally poor research track record/output and not well known/pioneers in machine learning.

- 1) Lester Mackey, 2012 PhD with poor research track record/output. No discoveries, no significant pubs, even google scholar h-index is just 25.
- 2) Brenna Argall, Associate professor with poor research track record/output. No discoveries, no significant pubs in any major machine learning journals or even conferences, h-index is also 25.
- 3) Iordanis Kerenidis, senior researcher with poor research track record/output, similar to previous two keynote researchers, even h-index is just 24.

IJCNN 2020 Keynote Speakers (see https://wcci2020.org/speakers/): 6 high quality pioneers in the field of machine learning/neural networks

- 1. Stephen Grossberg one of the pioneers in neural networks, discoveries such as adaptive resonance theory, etc.
- 2. Kunihiko Fukushima one of the pioneers of neural networks, discoveries such as Neocognitron, Deep CNN, etc.
- 3. Alexander N Gorban one of the pioneers of neuroinformatics.

There are 3 more high quality speakers. Please see https://wcci2020.org/speakers/ for all 6 ijcnn2020 keynote speakers. Both ICML and NIPS are organised by a group of random individuals without any endorsement or review by any professional organisation in the field of Machine Learning where IJCNN is organised by well-known and prestigious professional organisations such as International Neural Network Society (INNS) and IEEE.

Link to comparator report:

http://portal.core.edu.au/core/media/conference\_submission\_2020/Data\_Comparator\_for\_1416\_560.pdf

### Other Relvant Info

Other relevant information: We would like to request committee to consider following info:

- 1. IJCNN is one of the oldest and most prestigious international conferences in neural networks. First IJCNN was held in 1987 ( https://ewh.ieee.org/conf/ijcnn/1987/ijcnn-1987.pdf).
- 2. It is attended by pioneers of neural networks and also early career researchers from around the world.
- 3. It always has some of the top neural network people in its organising and program committees. Many keynote speeches are given by pioneers of neural networks.
- 4. The overall quality of submitted papers is very high and very few multiple submissions. This is one reason why acceptance rate cannot be 20% like in some other conferences. The acceptance rate for IJCNNâĂŹs oral presentation papers was 30% in 2020.
- 5. IJCNN papers are reviewed by 3-5 expert reviewers/paper and PC members.
- 6. IJCNN is attended by 100s of university and industry researchers from around the world NOT just few researchers with multiple papers from few organisations/countries.
- 7. It is a flagship conference of well-known International Neural Network Society (INNS) and IEEE Computational Intelligence Society. If committee requires any further info, please contact Brijesh/Marley.

### Attachments

N/A

#### **Proposers**

First name: Brijesh Last name: Verma

Affiliation: INNS Australia Chapter and Central Queensland University

Email: b.verma.qld@gmail.com

First name: Marley Last name: Vellasco

Affiliation: IEEE Computational Intelligence Society

Email:

# Submitted By

Name: Verma Brijesh

Email: b.verma.qld@gmail.com