## IEEE – CIS Distinguished Lecturers Program

## Dr. James C. Bezdek

## at the XV Summer School on Computer Intelligence (EVIC 2019)

## at Universidad Austral de Chile, Valdivia, Chile

In December 2019, Dr. Bezdek was our distinguished guest thanks to the DL program of the IEEE-CIS. Dr. Bezdek is currently affiliated to the Department of Computing and Information Systems, University of Melbourne. He is also Nystul Professor and Eminent Scholar of Computer Science at the University of West Florida in Pensacola. He is the Past President of North American Fuzzy Information Processing Society (NAFIPS), the International Fuzzy Systems Association (IFSA), and the IEEE Computational Intelligence Society. He is also a Founding Editor of the International Journal of Approximate Reasoning and the IEEE Transactions on Fuzzy Systems. He is a Life Fellow of the IFSA. He received the IEEE Third Millennium, IEEE CIS Fuzzy Systems Pioneer, IEEE Frank Rosenblatt Technical Field Awards (TFA), and the Kempe de Feret Kavli Institute for the Physics and Mathematics of the Universe (IPMU) Kempe de Feret Award. He developed the fuzzy c-means (FCM) algorithm, considered one of the most important discoveries in fuzzy pattern recognition and related areas and the clustering algorithm of choice for most practitioners in fuzzy exploratory data analysis. Areas of research benefiting from Dr. Bezdek's work include diagnostic medicine, economics, chemistry, image processing, meteorology, web mining, geology, target recognition, regression analysis, document retrieval, structural failure and irrigation models.

Dr. Bezdek gave two lectures at the Universidad Austral de Chile, the first titled "Every picture tells a story: Visual Cluster Assessment in Square and Rectangular Relational Data" on Tuesday December 17th and the second "How big is too big? Clustering in (static) BIG DATA with the Fantastic 4" on Wednesday December 18th. The talks were very well received with an audience of more than 200 students and professionals from Chile and Latin America. These talks were part of the Summer School on Computational Intelligence (EVIC) 2019, which was held in Valdivia, Chile between December 16th and 18th, 2019.

The EVIC is jointly organized by the Chilean Chapter of the IEEE Computational Intelligence Society and the institution that hosts it, which in year 2019 was the Universidad Austral de Chile (UACh). Our aim is to show state-of-the-art research and developments in Computational Intelligence (Neural Networks, Fuzzy Logic, and Evolutionary Computation, etc.), and also to spread the knowledge about Computer Intelligence by explaining the basics of its models, algorithms, and their applications in many different areas. EVIC is a reference event in Latin America, which brings together the entire ecosystem that revolves around Computational Intelligence and its academic, business and industrial-related opportunities (more details at at <u>www.evic.cl</u>).

This year we had a total of 211 attendees, apart of the speakers (18), helping personnel (5) (mostly students) and organizers (8). This corresponds to 62 students from the Universidad Austral de Chile, Valdivia, 117 students from another 15 different Chilean universities located in Santiago and other regions, 4 international students (Colombia and Mexico) and 28 Chilean professionals. The School was highlighted by the regional newspaper "El Diario Austral" <u>https://www.australvaldivia.cl/impresa/2019/12/17/papel/</u> (front page and page 5) and in the university news<sup>1</sup>. The presentation structure was to have plenary talks in the mornings and parallel sessions of tutorials in the afternoon. There were coffee breaks offered in the morning and in the afternoon. EVIC includes an extensive grant program to help students to attend.

DL talks were open for free for all IEEE members. An invitation to members was posted in the local section webpage: <u>https://ieeechile.cl/invitacion-a-2-charlas-del-prof-jim-c-bezdek/</u>.

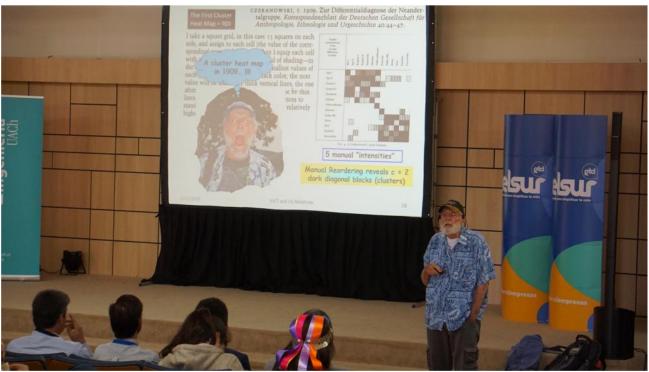
On Tuesday 17th, afternoon, we hosted a poster competition for students where 21 works were presented. Participants had the great opportunity of having Dr. Bezdek as one of the jury members.

We are tremendously grateful to Dr. Bezdek for his visit to the Universidad Austral de Chile, Valdivia and to the IEEE CIS DL program. Dr. Bezdek's participation in the summer school was a key contribution to its success. Participants enjoyed his interesting talks and inspiring vision on computational intelligence.



<sup>&</sup>lt;sup>1</sup><u>https://diario.uach.cl/fci-reune-a-destacados-investigadores-nacionales-e-internacionales-e-internacionales-e-inteligencia-computacional/</u>

Dr. Bezdek was our IEEE-CIS distinguished lecturer at EVIC 2019 held at Universidad Austral de Chile, Valdivia. His talks were given at the main auditorium of the engineering campus of the Universidad Austral de Chile with more than 200 attendees



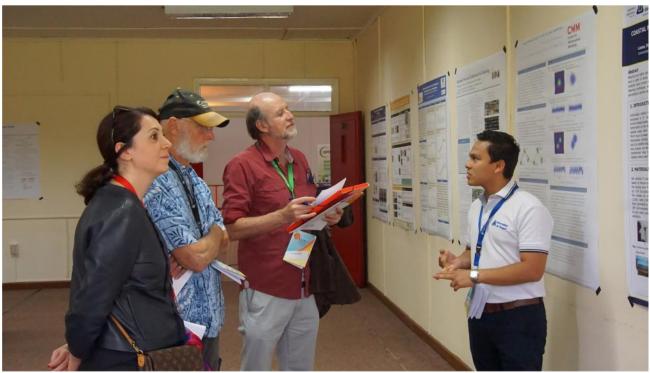
Dr. Bezdek presenting his work on "Visual Cluster Assessment", his first plenary talk at EVIC 2019, Tuesday December 17th 2019, Valdivia, Chile



Questions time at the end of his first plenary talk at EVIC 2019



Dr. Bezdek's second talk on "Clustering for BIG DATA", Wednesday December 18th 2019, Valdivia, Chile



Dr. Bezdek participating as a jury for the student poster competition, at EVIC 2019



Dr. Bezdek participating as a jury for the student poster competition, at EVIC 2019