

May 18-19, 2022

**ITEM 200-1502-R0522**

**Request for Authorization to Confer the Title of Professor Emeritus of Computer Science on Dr. Michele M. Van Dyne – Montana Technological University**

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**THAT**

Upon the occasion of the retirement of Professor Michele M. Van Dyne from the faculty of Montana Tech, the faculty wishes to express its appreciation for her years of dedicated and valued service to the institution, the Department of Computer Science and the state of Montana by recommending the rank of Professor Emeritus be conferred upon him by the Board of Regents of Higher Education.

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**EXPLANATION**

Michele Van Dyne grew up in Montana and studied Psychology at the University of Montana in Missoula. She graduated with her Bachelor's degree with high honors in 1981 and continued on to graduate school in clinical psychology, again at U of M. After getting her first client as a student, she realized that perhaps she wanted to pursue a more logical field. Michele changed focus, making up undergraduate requirements, and earned her Master's degree in Computer Science at U of M in 1985.

After graduating with her Master's, and with a passion for artificial intelligence, Michele went to work for Allied-Signal Aerospace in Kansas City, MO – one of the Department of Energy constituents of the Nuclear Weapons Complex – where she maintained a Q clearance. At Allied-Signal she worked on several AI related projects, one of which (cable routing) became documented in a textbook chapter on expert systems in manufacturing.

In 1989, Michele left Allied-Signal to join the newly formed AI team at United Telecom / Sprint. While at Sprint she organized and grew a community based special interest group called ESKaMo – Expert Systems in Kansas and Missouri. Through this group she got acquainted with work going on at the University of Kansas which led to two things: starting an applied research company focusing on artificial intelligence and returning to school for her PhD.

IntelliDyne, Inc. was founded by Michele in 1990. Among some of its more well-known clients were the US Department of Health and Human Services, NASA Goddard Space Flight Center, Midwest Research Institute, Duke University, and her former employer, Sprint. In doing this work, she realized that she could attract more contracts by getting additional education, so she simultaneously started work on her PhD in Electrical Engineering at the University of Kansas, and graduated in 2003. While there, she was awarded the Emily Taylor Women's Resource Center Award for Outstanding Nontraditional Woman Student in 1997.

In 2005, Michele moved herself and her company back to her home state of Montana. Local resources were such that there was no workforce in place for her company. In 2006 she was surprised to see an advertisement for a faculty position in Computer Science open at Montana Tech. She started at Montana Tech as an assistant professor in the fall of 2006, with a goal of helping to build a program that could provide the kind of work force needed by industry.

Michele took over as department head in January 2008, and remained department head through the spring of 2011, while at the same time meeting requirements for promotion to associate professor. She stepped down in 2011 to work on tenure and promotion to full professor which she achieved in 2012 and

2015. She then returned to the department head position in the fall of 2015 which she has held until now. During her time at Tech Michele has seen the department weather low enrollment early on, with only 57 students in the fall of 2006, to 117 students in the fall of 2021.

Michele's research interests include artificial intelligence (AI), machine learning and image processing. Some of the projects to which she has applied AI include:

- Determination of potential crash sites for search and rescue operations for private aircraft
- Negotiation of shared tasks in a multi-agent target tracking environment
- Space vehicle service scheduling
- Identification of sea ice types from SAR imagery
- Predicting preterm delivery risk
- Hazardous waste emissions prediction
- Sea ice feature matching across imagery
- Identification of larvae in imagery

Michele plans to stay in Montana, enjoying the outdoor opportunities and being close to family.

For these and other contributions, the Board of Regents of Higher Education is pleased to confer upon Michele Van Dyne the rank of Professor Emeritus of Computer Science at Montana Tech together with all the rights, privileges, and honors thereto appertaining. Michele Van Dyne grew up in Montana and studied Psychology at the University of Montana in Missoula. She graduated with her Bachelor's degree with high honors in 1981 and continued to graduate school in clinical psychology, again at U of M. After getting her first client as a student, she realized that perhaps she wanted to pursue a more logical field. Michele changed focus, making up undergraduate requirements, and earned her Master's degree in Computer Science at U of M in 1985.

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## ATTACHMENTS

None