

January 12, 2017

ITEM 174-2001-R0117

**Request for Authorization to confer the title of Professor Emeritus of Computer Science upon Rockford Ross**

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**THAT**

Request for authorization from the Montana Board of Regents that Dr. Rockford Ross be granted emeritus status at Montana State University with the title of Professor Emeritus of Computer Science.

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**EXPLANATION**

As a salute to his long career and many education, research, service, and good-humor contributions to MSU and the MSU Computer Science (CS) Department (now the Gianforte School of Computing), as well as the State of Montana and the international Computer Science education and research community, we nominate recently retired Professor of Computer Science, Dr. Rocky Ross, for Emeritus status. As a preface, the case could be made that Rocky is the grandfather of the Gianforte School of Computing.

Rocky joined MSU's Computer Science Department in 1983 when there was scant—if any—culture of quality upper-division and graduate teaching, funded research, and publishing. In spite of this situation, however, many things drew Rocky to MSU. His father was a US Bureau of Indian Affairs forester, so Rocky had learned from his youth to love outdoor splendors of the kind Bozeman offered. (As an aside, throughout his career at MSU Rocky was a mentor to many Native American students who passed through the Department, his last being Masters student Michael Running Wolf.) Beyond location, though, Rocky could envision a high-quality CS Department at MSU. He recognized that MSU, as a land grant institution with the State's only comprehensive College of Engineering, presented the ideal environment in Montana in which to grow a first-class CS Department with BS, MS, and PhD degrees. It was a challenge he relished.

In his first year at MSU, Rocky helped formulate the new CS Department and initiated a discussion with the Board of Regents about a PhD program. In addition, Rocky convinced a former mentor and colleague, Dr. Denbigh Starkey (now Professor Emeritus), to accept the position of Head of the new Department. Denbigh and Rocky worked hand in glove throughout Denbigh's eighteen years as Department head, hiring new faculty and ushering in the PhD program. Rocky also made important personnel contributions by convincing Gary Harkin, one of the original CS faculty instructors, to complete a CS PhD degree at WSU and by advocating for the hiring of a pedagogically oriented faculty member who could help reformulate the CS lower division curriculum.

Rocky's 32 year career at Montana State University is filled with highlights.

- With respect to teaching, learning, and mentoring, he:
  - Taught most courses in the CS undergraduate and graduate curricula.
  - Helped develop, implement, and publish an innovative lower-division CS curriculum.
  - Readily established rapport with students, achieving high student evaluations. One telling student comment was, "Dr. Ross is the David Letterman of the CS Department."
  - Was the go-to faculty member for mentoring students with special needs. Rocky guided several BS, MS, and one PhD students through mental health issues to degree completion.
  - Was recognized with numerous departmental, COE and industry "teacher of the year" awards.
  - Continues in retirement to take on classes for traveling instructors, committee responsibilities, and other helpful roles as need warrants.

- With respect to service, he:
  - Served on numerous influential University, College, and Department committees.
  - On the international front, was the editor of the long-running “Education Forum,” a quarterly thoughtful, yet humorous, column in the *Newsletter of the Special Interest Group in Algorithms and Computation Theory (SIGACT)*, the voice of the international Computer Science theory community. His column was widely read, putting MSU on the CS theory map around the world and resulting in his being recognized with the SIGACT Outstanding Service Award.
  - Served as Editor of SIGACT News.
- With respect to research, he:
  - Was PI of the first-ever NSF grant awarded to the Department.
  - Helped cultivate a culture of grantsmanship and publishing within the Department.
  - Maintained a record of regular funding from agencies that included NSF and DOD, even when research was not an emphasis in the early days of the Department.
  - Obtained interdisciplinary NSF grants with the Center for Biofilm Engineering and the Department of Electrical and Computer Engineering.
  - Published numerous conference papers, book chapters, and presentations, most at ACM-SIGCSE (the largest CS education conference in the world) and ITiCSE (the largest CS education conference outside of the US).
  - Was an invited visiting professor at the Helsinki University of Technology in Finland.
  - Was the advisor of the first student to be granted a PhD in Computer Science in Montana.
  - Has continued to contribute to MSU in retirement as co-PI on a continuing grant and in seeing his final PhD candidate, Aaron Hall, to completion.
  - Was an NSF grants reviewer and site evaluator, as well as a paper reviewer for various journals.
- With respect to creative activities, he:
  - Along with co-author Denbigh Starkey published three CS textbooks.
  - Developed a Web-based infrastructure for authoring online textbooks.
  - With co-authors in MSU’s Center for Biofilm Engineering, wrote the first undergraduate textbook on biofilms, using his online textbook system. Rocky presented this work at the 163<sup>rd</sup> meeting of the Society for General Microbiology (SGM) in Dublin, Ireland, where he learned that he was the first computer scientist ever to address the Society.
  - Continues to work on Web-based textbooks on Biofilms and Computer Science topics.

In summary, Rocky’s formal career at MSU began with the incarnation of the Computer Science Department and ended with its metamorphosis into the Gianforte School of Computing, the beginning of a transition representing Rocky’s ultimate, long-held vision for computing on campus. According to Rocky’s vision, the School can provide a collaborative, rich, fertile, interdisciplinary environment for enhanced growth in research, instruction, and new degree offerings across the entire enterprise that reflect current State and National needs. So, though retired, Rocky is excited and gratified about this new direction and has offered to help nurture its implementation.

We thus heartily recommend Rocky for Emeritus status. Maybe he isn’t so retired after all.

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**ATTACHMENTS**

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None