SPEAKER SERIES: DR. DANIEL WEINACHT

As part of its annual Speaker Series, HIMSE hosted Dr. Daniel Weinacht, P.E. from ARES Corporation, on December 5, 2018. Dr. Weinacht’s topic was The Hanford Site: An Overview. This dynamic speaker kept the audience riveted with the history and technical aspects of the Hanford site, as well as stories of his vibrant and diverse career spanning over 30 years.

Established in 1943 as a key element of the Manhattan Project, the Department of Energy (DOE) Hanford Site played an essential role relative to the end of World War II as well as the Cold War. The Hanford Site is a decommissioned nuclear production complex operated by the United States federal government on the Columbia River about 20 miles north of Richland, WA. Dr. Weinacht discussed the site’s role within the overall DOE Complex, the facilities located there, and the evolution of the site’s mission from 1943 to the present. We were all transfixed as he spoke about the national security contributions, research activities, and the environmental decommissioning, decontamination, and cleanup mission that will continue for the next 40-50 years!

Dr. Weinacht completed his Ph.D. at the University of Illinois in May 1992. After working over nine years at Los Alamos National Laboratory, he joined ARES Corporation in 1998, providing support to DOE, DoD, and NASA projects. Dr. Weinacht is a licensed Professional Engineer in six states and a certified PMI Project Management Professional. READ MORE
NEW MSSA CLEARED TALENT PATH
Our Microsoft Software and Server Academy started a new off-cycle pathway on October 22, 2018. It’s called Cleared Talent and differs from earlier cohort versions in that it started in the second term of our fall semester and will finish in the first term of spring semester on March 8, 2019.

In content, this new MSSA pathway is based on the Cloud application Development (CAD) tract with some content modifications. According to Robert Bone, Director of Industrial Sponsored Programs, these modifications will “align it to a specific business group at Microsoft, which focuses on C#, Networking, and Azure. The CAD path is new to Saint Martin’s, and we are scheduled to run our first standard CAD cohort in Spring 2019.”

A final major difference between this cohort and other versions, is that, in order to be eligible, you must have a specific security clearance, in addition to meeting the other standard MSSA program criteria. Applicants must have a Top Secret clearance with an SSBI investigation type. The next Cleared Talent cohort is scheduled to start March 19, 2019 and will run through July 3, 2019, with the same pathway as the current Cleared Talent session.  READ MORE

NCIAE VISITING FACULTY
Saint Martin’s University was delighted to host two visiting faculty members this fall semester from the North China Institute of Aerospace engineering (NCIAE) as part of the continuing joint program between the two schools. Dr. Zhichao Jiang and Ms. Ru Ma spent several weeks at SMU and participated in the academic life of the campus. Dr. Jiang is a member of the mathematics faculty at NCIAE, and Ms. Ma is a member of the English Faculty. A third faculty member had planned to join them, but encountered travel difficulties.

Dr. Jiang and Ms. Ma observed classes, met with students, and toured the state widely. They also participated in several planning meetings about the logistics and expectations of the joint program.

Their visit complemented Dr. Rico Picone’s visit to NCIAE last summer, where he team-taught a course for NCIAE students. Several SMU faculty members are scheduled to teach in the summer of 2019 at NCIAE, and the first batch of transfer students from NCIAE are expected to arrive at SMU in the fall of 2019.  READ MORE
MEET MYRIAH BARRINGER

Ms. Myriah Barringer has been assisting with researching, writing, formatting, and publishing the newsletter you’re reading since Fall 2017. We wanted you to know more about this amazing young woman. Myriah transferred to Saint Martin’s in Fall 2017 from Centralia with an AA in Liberal Arts. She is currently an English major with an expected graduation in May 2019.

Myriah has applied to the University of British Columbia for her Masters in English Literature, and then plans to pursue her doctorate, with a final goal of being an English professor at the college or university level. Her professional interests lie in the gothic genre, with authors like Edgar Allan Poe and Mary Wollstonecraft Shelley. She was recently initiated into the English honor society Sigma Tau Delta.

Myriah was born in Pueblo, Colorado, but was raised in Chehalis, Washington. Her personal pursuits focus on creative writing and poetry in all forms. She has written almost 300 poems, with two published. She also dabbles in theater and commercial acting. Thanks for all you do, Myriah!

2018 NICE CONFERENCE

Dr. Razvan ‘Alex’ Mezei recently attended the 2018 National Initiative for Cybersecurity Education (NICE) Conference and Expo in Miami, FL. This year’s conference theme, “Innovations in Cybersecurity Education, Training, and Workforce Development”, inspired presentations on innovative ways to grow and sustain a national cybersecurity workforce. Dr. Mezei was able to attend courtesy of CyberWatch West.

When asked what he gained most from the experience, Dr. Mezei replied, “First, I was able to enlarge my network by meeting several other cybersecurity educators and exchange information with them. I hope some of these contacts will turn into future collaborations. Second, the large range of presentations at the NICE conference provided me with a great amount of resources, that I hope to bring into various courses I will teach for Saint Martin’s, as well as aid in my own research.”

Many thanks to CyberWatch West for giving Dr. Mezei this incredible opportunity to enrich him as an educator and assist future students’ academic learning and understanding of cybersecurity.

READ MORE
CONCRETE CANOE GROVE

On November 8, 2018, we dedicated the Concrete Canoe Grove just south of Panowicz Foundry. It’s an innovative and artistic way to memorialize the work of our students done for the annual competition. Student Sarah Howsden was project lead and ensured the design and completion of the current four installations. This project wouldn’t have seen completion without the generous donation of personnel, equipment and materials from Thomas Howsden (Sarah’s father - time, materials, tools, and equipment), Dave Gustafson (Addison Construction Company - materials and a premium discount on rebar), and Scott Woodard (Miles Sand and Gravel - concrete, mix design, concrete truck and operator for pour). Dr. Jill Walsh was the project advisor, with assistance from Dr. Corrie Walton-Macaulay and many Engineering students. The dedication event was attended by SMU President Roy Heynderickx, Interim Provost Kathleen Boyle, EAB President Brian Ziegler, and several Engineering alumni, with fond memories of their own forays into concrete canoe building.

Abbot Neal Roth blessed the new exhibit with holy water on each canoe, noting that the last times he blessed each canoe, it was to keep water out of them. The plan is to exhibit each year’s new canoe outside Cebula Hall and create a new ‘grove’ exhibit from the previous canoe. A large plaque explaining the exhibit and honoring all previous Saint Martin’s canoes is also in the works.

UW CAREER FAIR TRIP

On October 31st, Ms. Shelbie Davis, HIMSE Laboratory Instructor, took 28 engineering and computer science majors to the UW Science and Engineering Career Fair at the Husky Student Union Building on UW campus. The purpose of this trip was to expose SMU students to a high volume of technical internships and job opportunities. Students were first taken to this event in 2016, and since then, the number of SMU students going to the career fair has doubled.

Over 115 potential employers were represented at the fair, which was sponsored by Science & Engineering Business Association (SEBA).

When asked about the event, Ms. Davis had this to say: “Some students were even given job interviews onsite. I could see their excitement about the possibilities for the future. They realized that they have endless opportunities. The moment of realization that you have something to offer and that you have opportunities is the reason I take students to the event. I remember being a student and transitioning into a young professional. It can be intimidating and overwhelming.

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Providing the opportunity for students to gain confidence in themselves during this transitional time is one of the ways Saint Martin’s builds well-rounded graduates.”

One student summed it up like this, “My experience at the UW Career Fair was amazing and powerful. I got a sense of what companies are expecting from students for internships or jobs. Also, I learned how to present myself formally with recruiters. Furthermore, since UW is popular and has many engineering students from different colleges coming to the Career Fair, I observed the crowds and interacted with other experienced students on what questions I should ask and how to handle whole conversations with recruiters. Overall, it was awesome, especially because we interacted with many people.”

Thanks to Shelbie Davis for leading this trip and congratulations to all of the students who participated in this amazing experience! [READ MORE]

**PI TAU SIGMA INDUCTION CEREMONY**

On November 9, 2018 the Saint Martin’s Alpha Tau chapter of Pi Tau Sigma held an induction ceremony for four students – Randall Johnson, Joseph Jungers, Brandon Metra and Connor Snow. Faculty member Shelbie Davis was also inducted as an honorary member.

Pi Tau Sigma is the honors society for Mechanical Engineering students. Its members are chosen on the basis of sound engineering ability, scholarship (upper 35% for seniors, upper 25% for juniors), personality, and probable future success in their chosen field of Mechanical Engineering. The Alpha Tau Chapter of Saint Martin's was initiated in 2003 and has been going strong ever since.

Congratulations to the Fall 2018 inductees! We wish you all continued success! [READ MORE]

**SAVE THE DATE! 2019 ENGINEERING BANQUET**

The highlight of the academic year, our **Engineering Banquet**, is set for **Friday, February 22, 2019. The event will be held in Cebula Hall’s 3rd Floor Event Space from 5:30-8:00 p.m.** This year’s guest speaker will be Jeff Peacock, PE, of Parametrix. He joined Parametrix in 1990 as a transportation staff engineer, and in 2008, he became president and chief executive officer.

Parametrix was founded in 1969 by Waite Dalrymple (SMU Board Member) and George Capestany as Delta Engineering. In 1974, two of the divisions, Delta Engineering and Seattle Marine Laboratories were restructured as Parametrix. With strength in both engineering and science, Parametrix became known as the premier firm for solid waste and city engineering in Washington, and has expanded with offices in Washington, Idaho, Oregon, and New Mexico. [READ MORE]
FACULTY NOTES – NOTED FACULTY

Dr. Corrie Walton-Macaulay co-authored a paper, “Small-strain shear modulus behavior from a laboratory scale cross-hole seismic text” and presented the paper in a poster session at the Proc 7th International Conference on Unsaturated Soils (UNSAT2018) in Hong Kong, China, 3-5 August.

He also attended the Excellence in Civil Engineering Education (ExCEEd) teaching workshop last summer before coming here to start teaching this fall. The workshop is a 6-day practicum that provides engineering educators the opportunity to improve their teaching abilities. ASCE has presented this workshop each summer for the past 19 years! READ MORE

Dr. Mario Guimaraes, Xuguang Chen, Harold Nelson, and Razvan ‘Alex’ Mezei of our Computer Science Department attended the Northwest Regional Conference of the CCSC (Consortium for Computing Sciences in Colleges) held at UW Bothell earlier this semester. Dr. Guimaraes presented his tutorial “Data Warehouse and Data Mining with SQL Server” and Dr. Chen presented his tutorial “Teaching Recursion via Control Flow and Code Comprehension in CS1” at the conference. Dr. Mezei noted, “It’s a great way to connect with other Computer Science educators from the area, learn about new trends emerging in computer science education, and present our own work.”

Students are encouraged to participate in future CCSC conferences with poster presentations. Dr. Mezei asked this organizers about including programming competitions for students at next year’s conference. According to Dr. Mezei, “Several other CCSC regions include a programming contest component for the students, and I found it to be a great motivator for our students to learn more in certain computer science programming courses --data structures and algorithms, in particular.” READ MORE

Dr. Rico Picone’s work on his 2017-granted patent “Separative Magnetic Transport in a Magnetic Field Gradient”, continues. The patent is a product of his collaboration with the University of Washington and Cornell University, including the ongoing research grant he has jointly with Cornell. When asked about the practical applications of this work, Dr. Picone noted, “The application of this technology to microscopic imaging techniques, especially nanoMRI, could transform the scientific and medical understanding of biological molecules, allowing many of them to be directly imaged in three-dimensions for the first time. Among other benefits, this understanding would significantly speed the processes of pharmaceutical design. Potential non-microscopy applications of Separative Magnetic Transport include clinical MRI imaging and quantum computing.” READ MORE
Faculty members, Drs. Chen and Guimaraes, Dr. Radana Dvorak, and Mr. Mark Wright, attended the SQLSaturday event on November 3, 2018 in Portland, Oregon. Five Saint Martin’s students also attended: Raj Bhetwal, Gabriel Alvarado, Jay Bang, Steven Norfleet, and Hassan Al Hukash. When asked to define this event, Dr. Chen said, “SQLSaturday is a free training event for Microsoft Data Platform professionals and those wanting to learn about SQL Server, Business Intelligence, and Analytics.” Dr. Chen presented his tutorial, “Teaching Recursion via Control Flow and Code Comprehension in CS1” at the conference. More than 40 sessions were offered by ‘world class’ speakers, covering many exciting advances in Microsoft’s data technologies, from beginner classes to advanced options for professionals. READ MORE

CALENDAR AND EVENTS

- Holiday Recess and Academic Calendar
  Mon., Dec. 17-Sun., Jan. 13. NO CLASSES.
  Mon., Dec. 24-Tues., Jan 1. OFFICES CLOSED.
  Mon., Jan. 21. Martin Luther King Day (SMU CLOSED)
  Mon., Feb. 18. Presidents Day (SMU CLOSED)

- Robotics Challenge Kickoff Event
  Sat., Jan. 5. Worthington Conference Center, 6:30-9 am.

- HIMSE International Students Coffee with Dean
  Thur., Jan 31. 10am-noon, Cebula Societies Room 202

- Engineering Awareness Events
  Fri., Feb. 22. Engineering Banquet 5:30-8 pm Cebula Hall 3rd Floor, Speaker: Jeff Peacock
  Mon., Feb. 25-Fri., Mar. 1. Engineering Week
  Wed., Feb. 27. Engineering Awareness Day 8:00-1:00 Cebula Hall

ALUMNI ACHIEVEMENTS

Our alumni hold a special place in our minds and hearts! We want to hear from you and recognize your achievements in life and in your careers! Please send us your story and/or a photo with a caption. Email your items to us at: SMUHIMSEAlumni@stmartin.edu

We look forward to recognizing you in a future Cornerstone issue!
DEAN'S CORNER

Advent is a time to prepare for the Nativity, and one of the ways we prepare is by being mindful of and thankful for the many blessings we have received. This Advent, I am particularly grateful for the wonderful people who comprise the engineering community at Saint Martin’s.

I am grateful for our wonderful faculty, full-time and part-time, who are the teachers and role models for our students. They are the most committed group of colleagues imaginable, motivated by the purest desire to educate and inspire engineers for the betterment of society. They are all amazing and reading their annual faculty activity reports fills me with awe at their energy and dedication.

I am grateful for our staff, who are the grease that lubricates the sticky gears that sometimes enmesh our students and faculty. We are blessed with tremendous talent and dedication in our engineering staff, and the many other staff members across campus who support all our students.

I am grateful for our students, who are so hard-working and smart. They exemplify community, and their activities do so much good for the campus and surrounding region. They are our future, and the future looks bright!

I am especially grateful for our alumni and donors. The margin of excellence we enjoy in our programs is made possible by their support. More importantly, the cross-generational community and its support and love for both Saint Martin’s and the Hal and Inge Marcus School of Engineering is unique – and inspires me every day.

And I am grateful for our monks, who participate in all our activities, and who by their witness remind us of the importance of the interplay between faith and reason.

We were able to gather for a Holiday party earlier in the month and share fellowship just before the grading surge. It is a wonderful group!

From our entire engineering family to yours, best wishes for a Blessed Christmas, a Merry Holiday Season, and a Happy New Year!

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