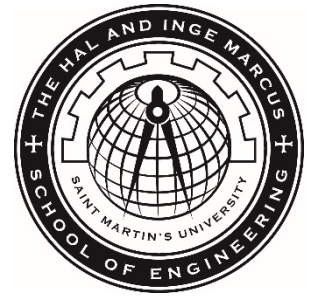




Saint Martin's
UNIVERSITY



CORNERSTONE

The Hal and Inge Marcus School of Engineering

Spring 2023- MARCH



WELCOME SPRING!

Spring has sprung – the weather improves – blossoms burst forth – and everything goes into high gear!

Our Engineering Awareness event on February 22nd for our visiting high school students was a great success with about 80 students participating! The 71st Annual Engineering Banquet held February 24th was also well received with a very informative keynote address on the planning and progress surrounding a new regional airport. Fascinating!

Now it's all about senior design project completion and the selection of the Civil Engineering, Computer Science, and Mechanical Engineering capstones of the year. We will also select our CE, CS, and ME students of the year, HIMSE International Student of the Year, and the recipient of the Hal and Inge Marcus Service & Community award. All will be recognized at both Honors Convocation on April 25th and at our HIMSE event on May 5th. The May 5th event also inducts graduating seniors into the Order of the Engineer (for both CE/ME -commonly referred to as the Ring Ceremony) and The Pledge of the Computing Professional (for CS, where pins are issued). We're looking forward to these events where we get to congratulate all of our HIMSE graduating seniors. Then the next day, it's commencement, when we proudly watch our students graduate with all the pomp and circumstance they have earned! It's a wonderful time of year, and we hope you'll celebrate it with us!

JOIN OUR LINKED IN GROUPS

Don't forget to join our LinkedIn groups to continue to keep the community vibe alive – network with each other, mentor our students, and feel free to post/share info about scholarships, internships, and job opportunities.

ENGINEERING:

[TO JOIN THE ENGINEERING GROUP](#)

COMPUTER SCIENCE:

[TO JOIN THE COMPUTER SCIENCE GROUP](#)

FAREWELL AND WELCOME NEW STAFF

Two of our JBLM military program coordinators have left us for new adventures – **Michelle Morales-Premo** and **Claire Gudenkauf**. We wish them all the best and thank them for their service to Saint Martin's!

We welcome our two new JBLM Military Program Coordinators, **Isabelle Van Patten** and **Kaitlynn Tennant**, who will start out at Stone Education Center on Fort Lewis next week. All the best to them and welcome to the JBLM Campus team and Saint Martin's University community!

CYBERSECURITY CLUB TEAM PLACES AGAIN AT PRCDCC

For the first time since 2019, the Pacific Rim Collegiate Cyber Defense Competition (PRCCDC) was held in-person March 24-26, hosted by Columbia Basin college in Pasco, Washington. Eight regional teams from three states participated in this year's competition. Our Cybersecurity Club team has been preparing since last fall and won 3rd place in the event! Congratulations to the them on the teamwork and the win!



Front row (l-r): Krizia Marie Ragotero, LJ Montefalcon, Jackson Philbrook

Middle row (l-r) Kevin Salas, Benjamin Gress, Bronson Stone

Back row (l-r) Peter Truax, Arturo Avila, Mark Wright

WAV2T WELCOMES MARRIED COUPLES INTO THE PROGRAM

Submitted by Jose Otero, WAV2T Career Development Manager



(l-r) Jia Park and Gaige Smith; Casey Wiseman and Hyeon Gin Bae

The WaV2T program is a 16-week, full-time, in-person program aimed at transitioning service members, veterans, and their spouses by providing academic and technical training, professional coaching, and certification for placement in the IT industry. The program has achieved great success, as evidenced by the enrollment of two married military couples – **Jia Park** and **Gaige Smith**, and **Casey Wiseman** and **Hyeon Gin Bae**-- in the Spring 2023 Server and Cloud Administration cohort. When asked about their decision to take the program together, Jia and Gaige stated that they were impressed with the program's approach to education and certification preparation

and found the supportive learning environment to be beneficial. Casey and Hyeon Gin expressed their shared passion for the IT industry and credited the program with providing them with valuable insights and skills necessary for employment in the field. Congratulations to both couples on their decision to participate in the WaV2T program together, and best of luck to them on their journey toward successful employment in the IT industry.

MILITARY-AFFILIATED AWARDS

On February 28th, Saint Martin's and the Center of Excellence for Veteran Student Success hosted the Annual Military-Affiliated Leadership Awards Dinner. The event featured guest speaker and SMU alumnus Retired U.S. Army Sergeant Major **Patrick McDonald '84**, currently serving as Manager of Facilities and Protocol for the Washington Secretary of State's Office.

Six awards were made as follows:

- Leadership in Living the SMU Mission awarded to **Roger Dover**
- Most Inspiring Military-Affiliated Student of the Year awarded to **Michael D. James**
- Leadership through Mentoring awarded to **Andrew Horton**
- Military-Affiliated Academic Achievement awarded to **Demetrick Louis** and **David Martinez**
- Outstanding Staff Member of the Year awarded to **Adam Takata**
- Outstanding Faculty Member of the Year awarded to **Gabriela Hyre**

[Those awardees listed above in **red** are either students or staff in our HIMSE community!]



(l-r) Demetrick Louis and Adam Takata



Andrew Horton

Congratulations to all those honored this year who went above and beyond in support of our military-affiliated Saint Martin's community!



VISIT TO LOTT FACILITY

On February 7th, **Dr. Tapas Das** and graduate students, **Joseph Lee** and **Kaitlyn Velazquez**, in his Environmental Measurements course visited the Lacey, Olympia, Tumwater and Thurston Co (LOTT) Clean Water Alliance Facility. The LOTT Water Alliance is a state-of-the-art plant that provided Dr. Das and the visiting students in-depth information about the design and operation of the wastewater treatment plant and modern technology applications for water reuse, recycling, and conservation.

Photo at left (l-r) **Mr. Tyle Zuchowski** (Capital Planning Manager), Dr. Tapas Das, Joseph Lee, Kaitlin Velazquez

GUEST SPEAKERS TO EDIFY OUR STUDENTS' LEARNING

(Submitted by Mrs. Leslie Washko, Lecturer)

On February 2nd the Engineering Economics & Venture Finance class (ME 314/ MEM514/ MME514) welcomed **Danielle Strachman** as a guest speaker. Ms. Strachman is the co-founder of 1517 Fund (1517fund.com), a venture capital organization that has a somewhat radical philosophy regarding funding startups and small businesses. The tagline on the landing page of their website proudly claims, *"We back dropouts, renegade students & deep tech scientists at the earliest stages of their companies."* This is a different approach to startup VC funding as most VCs and angel investors prefer to invest in companies that have been in business awhile and can show that they are the "next big thing" based on their profits over several years.

Danielle was very amiable and answered our questions about how engineering students can prepare to approach 1517 Fund as well as other VC firms with their ideas and passions for creating change. She was very positive as she shared several anecdotes of successful young entrepreneurs who have been funded by their firm, and encouraged the students to be bold in pursuing their ideas and entrepreneurial dreams.

On February 16th we welcomed **Aaron Whitaker**, a business banker who specializes in helping small businesses, to speak to the class about options for debt funding such as small business loans, lines of credit, business credit cards, and business equity loans. He stressed the importance of keeping records for everything and noted that even if a business founder has a finance officer, the founder should still be familiar with financial statements and know how the cash flows look. He reminded us that even though it is good to have available credit and a good credit record, the best way to grow a small company is to limit, or stay out of debt. Aaron answered many questions from the students and helped them understand that there are many options available, and many financial institutions that have services and products tailored to young entrepreneurs.

We are so grateful for these professionals who graciously accept the invitation to spend time with us and share their expertise and valuable information.

(Submitted by Dr. Liza Bornasal and Kaylah Tibbits)



Our student chapter of the Society of Women Engineers (SWE) hosted guest speaker **Captain Wendy Lawrence**, a former NASA astronaut and naval officer. After graduating from the Naval Academy, she became a helicopter pilot, before becoming a NASA astronaut. At NASA she flew several missions to the International Space Station and conducted research. She now spends her time doing STEM-related events, encouraging more women to join STEM! (photo at left-speaking and in her Astronaut class of 1992 bottom row far left)

(Submitted by Dr. Jae Chung)

Cole Baldino, Project Manager at South Puget Sound Salmon Enhancement Group came to speak to students on March 16. He introduced his current salmon enhancement projects in Sequelitchew Creek, Butler Cove Estuary, and the Deschutes Tribes private fish barrier replacement.

(Submitted by Dr. Liza Bornasal)

On March 22nd, **Ken Fuller**, P.E., Director of the Washington Board of Registration for Professional Engineers and Land Surveyors (BRPELS), presented on “The Pathway for Becoming a Professional Engineers” on Wednesday, March 22nd. Joining Mr. Fuller was **Greg Schieferstein**, Communication and Outreach Manager for BRPELS. Mr. Fuller, a Saint Martin’s University alumnus, talked to students about licensure as a Professional Engineer within the State of Washington. He answered a variety of questions related to the FE, PE, and SE exams, the use of the title “Engineer”, pathways for licensure for individuals receiving bachelor’s degrees from international schools, and other topics of interest to senior design students, graduate students, and faculty.

A LABOR OF LOVE

(Submitted by **David Stride**, SMU civil engineering student)



The whole team, with David Stride (back row 3rd from left), and widow Paula (front row left) in front of her new home.

Casa Angelina is a Christian Mission and part of a global [<https://www.whatmattersmm.org>], and part of a global mission's outreach that focuses on orphans and widows, as well as tending to lowly and impoverished as Christ commissioned. Casa Angelina is an orphanage, school, and local outreach clinic for the surrounding area of Pan-American Highway 5, Guatemala.

My wife Meryl and I are part of the 9-member Roots Community Church team that traveled to Guatemala in March to build a new home for widow Paula who was living about 15 minutes away from Casa Angelina in a mud hut. Paula's story is very touching as her son had recently passed from cancer, and her daughter-in-law and young grandchildren also live with her. She now lives in the new concrete-block and metal-roofed, fully furnished home that the team was blessed to construct for her through God's grace.

We were also able to extend the Casa Angelina pavers, add basketball hoops to the Athletic Complex, and work on a new Pergola for the 150-ish orphans living, and going to school on site at the mission campus.

It was an incredible opportunity to experience and share God’s love through our global community of believers, as well as participate in the labor of love that Christ commissioned us to do.

[We’re proud of you, David, your wife Meryl and the whole team who are really living the Benedictine values and your own Christian beliefs through this kind of service to others.]

GETTING TO KNOW US

Dr. Shahlaa Al Wakeel, Assistant Professor, Mechanical Engineering started as full-time instructor at Saint Martin's University in Fall 2019 and was hired last fall as an assistant professor. Dr. Al Wakeel received her Ph.D. in Structural Engineering and Structural Mechanics from the University of Colorado-Boulder. Her primary areas of research and expertise are structural engineering/ mechanics, materials science, fracture mechanics, and materials testing/modeling. Her areas of concentration in teaching are mechanics of materials, materials science, thermodynamics, multibody dynamics and fluid mechanics. She also coordinates as needed on the ME-specific portion of our Fundamentals of Engineering (FE) exam preparation course.



Dr. Floraliza Bornasal, Associate Professor, Civil Engineering, earned her BSCE cum laude here at Saint Martin's University in 2009. She then went on to earn her M.S. and Ph.D. in Civil Engineering at Oregon State University. Dr. Bornasal started teaching here in our civil engineering department in Fall 2015. Her areas of research interest are situated cognition, conceptual understanding and growth, research methods, discourse analysis, and safety in transportation engineering. Her teaching concentrations are transportation engineering, civil engineering senior design, research methods, and engineering education.

Dr. Xuguang Chen, Associate Professor, Computer Science, earned Ph.D. in Computer Science at the University of Regina, Saskatchewan, Canada. His areas of research interest are machine learning, web development, computer science education and e-commerce. Dr. Chen's teaching concentrations are web database development, programming languages, software engineering, artificial intelligence, parallel computation, Java programming, computer organization and assembly languages. Dr. Chen is also Program Director for our Masters of Science in Computer Science degree.



Dr. Daniel Einstein, Associate Professor, Mechanical Engineering, received his Ph.D. in Bioengineering from the University of Washington. His primary areas of research are fluid-structure interaction, biomechanics, biomedical engineering structural analysis, and computational dynamics. His teaching concentrations are computer applications in engineering, metaheuristics, heat transfer, and numerical optimization in mechanical engineering. Passionate about the environment, in 2013 Dr. Einstein founded and continues to very active with the Olympia Coalition for Ecosystems Preservation, which is an urban land trust.

Dr. Razvan 'Alex' Mezei, Assistant Professor, Computer Science, has a Ph.D. in Mathematics from the University of Memphis and four master's degrees in Computer Science, Mathematics, Statistics, and Online Teaching and Instructional Design. His areas of interest are applied mathematics, numerical methods, cybersecurity, healthcare informatics, and open source. His current teaching concentrations are algorithms and data structure, web application and development, ethical hacking, and programming.





Dr. Jill Walsh, Associate Professor, Civil Engineering, earned her Ph. D. in Structural Engineering from the University of California San Diego. Dr. Walsh's areas of research interest are structural and construction engineering, seismic design and analysis, bridge design, and geo-technical engineering. Her teaching concentrations are civil engineering senior design, reinforced concrete design, structural analysis, graphics, computer-aided drafting and solid modeling, and FE exam preparation-general engineering and civil engineering-specific.



FACULTY NOTES – NOTED FACULTY

Mrs. Shelbie Wickett, pursuing her doctorate at Michigan Tech, joined by her advisor Dr. Ana Dyreson and fellow student Ayush Chutani, presented a webinar on February 20 on their research regarding just how solar PV systems, particularly single-axis tracking systems, shed snow. Sounds fascinating,



Shelbie! [**READ MORE**](#) [**WEBINAR RECORDING**](#)



Dr. Tapas Das was honored with an invitation to present a lecture at the Chemical Engineering Centenary Celebration at Jadavpur University, Kolkata, India. The Chemical Engineering Department at JU is the oldest in Asia and held its centenary celebration "Chemervescence" February 25-27, 2023. Dr. Das' lecture title was "100 Years of Chemical Engineering Advancing Toward Sustainable Development".

Dr. Razvan 'Alex' Mezei recently had a book he authored accepted for publication by Springer Cham. The book is part of the book series "Synthesis Lectures on Computer Science and titled Introduction to the Development of Web Applications using ASP.Net (Core) MVC (hardcover ISBN 978-3-031-30625-9 and ebook ISBN 978-3-031-30626-6) due out in October 2023.

MSCS student **Ishi Agrawal** and **Dr. Radana Dvorak** will be presenting a tutorial workshop at the April 12-14 ACMSE (Association for Computing Machinery Southeast) virtual conference. The workshop is titled "Incorporating Fundamentals of Web Accessibility Modules into Computer Science Curriculum. Congratulations, Ishi and Dr. Dvorak! [**READ MORE**](#)

CALENDAR AND EVENTS

- ❖ Apr 3 Priority registration for summer/fall 2023 begins
- ❖ Apr 7 HOLIDAY-Good Friday (Lacey campus closed)
- ❖ Apr 9 Easter Sunday
- ❖ Apr 10 HOLIDAY-Easter Monday (Lacey campus closed)
- ❖ Apr 11 Last day for withdrawal (W grade) for Main-00 courses
- ❖ Apr 11 Mid-term grades due for 09/11 sessions
- ❖ Apr 15 Admitted Saints Day
- ❖ Apr 21 Last day for withdrawal (W grade) for 09/11 sessions
- ❖ Apr 25 Scholars Day and Honors Convocation
- ❖ Apr 27 Senior Commencement Fair
- ❖ Apr 28 St. Thomas Aquinas Study Day (no Lacey classes)
- ❖ May 1-5 Final Exams
- ❖ May 5 HIMSE Awards, Order of the Engineer, Pledge of the Computing Professional
- ❖ May 6 Commencement



DEAN'S CORNER

As I write this, I will leave in 48 hours to walk the Camino Santiago pilgrimage trail from Porto, Portugal to Santiago de Compostela, Spain, with my wife, Karen, accompanied by **Rick and Pam Panowicz**. This will be the fifth time Karen and I have walked to Santiago and the first for Rick and Pam. Pilgrimages are times to reflect on relationships: with God, with spouses, with colleagues, with duties. I will spend a significant portion of the time thanking God for the many gifts He has showered on me. Among those gifts is the great blessing of being at Saint Martin's University. I have grown to understand over the years that I was called to be here.

We tend to lose sight, in the daily trials of life, of the beauty and goodness that surrounds us. In the Hal and Inge Marcus School of Engineering on a day like today when the cherry blossoms are blooming, we are surrounded by beauty. We are also blessed with a caring, compassionate faculty, a professional and compassionate staff, and students whose potential is unbounded and being realized due to our collective efforts. We are supported in our mission by an Abbey that continuously gives us spiritual support and encouragement in our mission, which is their mission. We are also blessed by the most supportive alumni community in the nation. I will say that again: we are blessed by the most supportive alumni community in the nation. I give thanks for you!

I met some wonderful admissions candidates this past weekend at the Benedictine Scholars Day interviews. These sincere, talented students are searching for an engineering and computer science education beyond mere learning of a vocation. They were also in search of learning about what they are called to do in their lives. It was so gratifying to see that there are still strong students who are drawn to our Saint Martin's values-based education, encompassing dimensions that just are not captured at other schools in the state. Experiencing their eagerness to learn and grow was a tonic to me!

In a similar vein of values-based education, we have added six hours of instruction on the Benedictine Values to the Veterans to Technology program. We finished the first offering the last week of March, and student feedback has been overwhelmingly positive. One student said, "I have personally sat down and talked to my husband about the Benedict's (sic) values. We have tried to apply these values in our everyday lives as spouses, parents, and Catholics." Another said: "Critically thinking about what each value means is also both a mentally and spiritually rewarding task with our peers."

We will graduate the class of 2023 in a few short weeks. You can be proud that the entire Saint Martin's team has done their best to provide them the transformative education that will serve them well as they move on to lives inspired by faith, reason, service, and community. We will celebrate their successes in the graduation newsletter! Karen and I wish you a blessed Easter season!

Best wishes,

David H. Olwell, Ph.D., Dean
Hal & Inge Marcus School of Engineering



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