

SANTA CLARA UNIVERSITY

ENGINEERING NEWS

School of Engineering

DEAN'S MESSAGE

The academic year is coming to an end, and as it seems to be the trend, it has approached way too fast! Newly admitted students have come out to catch a glimpse of campus life for next year, during Preview Day. The campus recently celebrated another successful Day of Giving; A heartfelt thank you to everyone who generously donated to help ensure that we continue to 'Engineer with a Mission!' Our seniors are ready for their Senior Design Conference presentations, and we all eagerly await the end-of-the-year events and celebrations.

In this issue of *Engineering News*, you can read about our alumnus who was one of four people to be selected by NASA for a simulated journey to the red planet Mars (pg. 7), student spotlight of our first graduate of the Master's in Aerospace Engineering program (pg. 6), associate dean spotlight (pg. 2), and more!

As a parting note, I will be stepping down as Dean of the School of Engineering at the end of the summer. After a sabbatical, I am looking forward to going on phased retirement and watching the School continue to flourish in the coming years!

Elaine P. Scott, Ph.D. | Dean
School of Engineering



A LEGACY OF PASSION: DR. TONYA NILSSON'S JOURNEY AT SCU



Dr. Tonya Nilsson, senior lecturer and vice chair for the Civil, Environmental and Sustainable Engineering Department, began her journey at Santa Clara University (SCU) in 2010, driven by a twist of fate. Having previously held a tenured position within the California State University (CSU) system, Dr. Nilsson transitioned to SCU to find a new home in its vibrant academic

community. Dr. Nilsson's decision to shift from a tenured professor to a lecturer came with its challenges, including a change in status and ego. Despite these obstacles, she remained committed to making a meaningful impact in her students' lives. As Dr. Nilsson approaches the milestone of retirement, we reflect on her passion for teaching and dedication to fostering an inclusive, supportive environment that played a pivotal role in shaping the civil engineering program and its culture.

During her tenure at SCU, Dr. Nilsson assumed leadership roles in esteemed professional organizations, such as serving on the executive board of the Civil Engineering division of the American Society for Engineering Education. She also served as a senior mentor and conducted teaching demonstration classes at the national ExCEEEd Teaching Workshops, sharing her expertise with new participants.

Dr. Nilsson's commitment to excellence was recognized through numerous awards. She received both the Louis and Dorina Brutocao Award for Teaching Excellence and the School of Engineering Teaching Excellence Award. These honors were a source of great pride for her, as they are based on student recognition. Additionally, Dr. Nilsson was a recipient of the prestigious Presidential Special Recognition Award. This was for her leadership in developing and publishing a STEM Educational Master Plan, as well as her service on the STEM Academic Planning Team from 2017-2019. She also received the SCU Brutocao Family Foundation Award for Curriculum Innovation.

As a female engineering professor, she understood the importance of being a role model for her students, particularly for women and underrepresented groups. A standout moment occurred while she was serving as a quarterly adjunct lecturer early in her career; a male student approached her to express how much her presence in the classroom meant to the women students. They valued her wealth of knowledge and the fact that she represented what other women students could aspire to be.

[Continued on page 4](#)



THE ORDER OF THE ENGINEER LINK # 101 INDUCTION CEREMONY

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ENGINEERING WITH A MISSION

EMPOWERING DIVERSITY: DR. RUTH DAVIS' IMPACT ON ENGINEERING AT SANTA CLARA UNIVERSITY

Dr. Ruth Davis, Engineering's Associate Dean of Undergraduate Studies and Professor in Computer Science and Engineering, emerges as a luminary in the field of engineering education, her dedication to inclusivity, innovation, and academic excellence reshaping the foundations of Santa Clara University's School of Engineering. As Associate Dean of Undergraduate Studies, her 21-year tenure epitomizes an unwavering commitment to diversity, inclusion, and educational innovation, heralding a transformative era in the institution's engineering curriculum. Through pioneering initiatives and visionary leadership, weaving Jesuit values into the educational fabric, and fostering an environment where engineering thrives, Dr. Davis will be leaving an indelible mark as she steps down as Associate Dean at the end of this academic year.

Dr. Davis' tenure exemplifies her unwavering commitment to diversity, inclusion, and educational innovation. She spearheaded initiatives like the Women in Engineering & STEM Dinner and the Women's Reception for Preview Day, driving significant progress in boosting the presence of women engineering students. The Women in Engineering Dinner, which just celebrated its 20th anniversary, provides a platform for women engineers across various disciplines to connect and support one another, fostering a sense of belonging and solidarity. Dr. Davis' advocacy expands to include diversity and inclusion on a broader scale within her role. She helped to start, and has been a long-standing supporter of, the School's Summer Engineering Seminar (SES)—now in its 35th year and the recipient of both the 2022 and 2023 Inspiring Programs in STEM Award from *INSIGHT Into Diversity* magazine.

Dr. Davis' impact extends beyond strengthening the community into expanding the classroom experience. She actively restructured staff positions to better meet the needs of a diverse student body and led a school-wide initiative to reimagine the undergraduate curriculum. Her efforts, driven by a commitment to SCU's Jesuit values, aimed to develop engineering leaders with competence, conscience, and compassion, addressing the changing needs of society. Her innovative approach to engineering excellence is prevalent with her revamping the ENGR 1 course into a thematic, hands-on lab format, departing from the traditional one-hour lecture. This transformation not only enriched the learning experience but also fostered inclusivity, catering to diverse learning styles and backgrounds.

Her initiatives, notably recognizing her exceptional contributions, were honored with the President's Special Recognition Award by SCU's President, Julie Sullivan, this past year, and in 2020, Dr. Davis received the Society of Women Engineers Distinguished Engineering Educator Award.

"Dr. Davis exemplifies SCU's dedication to education of the whole person through her commitment to student success, advocacy for diversity and inclusion, and passion to promote engineering education!"

— Dean Elaine Scott

As Dr. Davis' tenure as engineering's Associate Dean of Undergraduate Studies comes to an end, she leaves behind a legacy of diversity, inclusion, and educational innovation. Her transformative initiatives, institutional leadership, and pioneering teaching methodologies have made an indelible mark on the School of Engineering and the wider engineering community. Dr. Davis' influence promises to continue shaping the future of engineering education, ensuring that her dedication to excellence and equity resonates for many generations to come.



DEAN ELAINE SCOTT'S IMPACTFUL TENURE



At the end of its 112th year, the School of Engineering will say a somber farewell to its very first woman leader, Dean Elaine Scott, as she steps down from her role as dean and takes her first-ever, much-deserved, sabbatical on her way to retirement. During her five-year tenure, the School was able to survive through a time of uncertainty, growing along the way in the number of students, faculty, donations, programs, and research funds. Under her leadership, the School was recognized as a leader in inclusivity, contributing to increased diversity and growth in the School's student body and faculty. Dean Elaine Scott's journey to lead the School of Engineering has been characterized by her commitment to engineering excellence and building an inclusive community. As we approach the end of her tenure, we reflect on the profound influence she has had on the School.

Before coming to Santa Clara University (SCU) in August of 2019, Dean Scott already had an illustrious career in higher education. She received her bachelor's and master's degrees in Agriculture Engineering from the University of California, Davis and holds two doctoral degrees in Agriculture Engineering and in Mechanical Engineering from Michigan State University, where she was among one of the first women to receive an engineering doctorate at the institution. Dean Scott has held faculty positions at Michigan State, Virginia Tech, the University of Utah, Seattle Pacific University, and the University of Washington Bothell. During her time at Virginia Tech, Dean Scott was a leader in founding the Virginia Tech - Wake Forest University School of Biomedical Engineering & Sciences, where she was appointed its first director. Before she arrived at SCU, Dean Scott was the founding dean of the School of Science, Technology, Engineering, and Mathematics (STEM) at UW Bothell for seven years. Dean Scott's proven track record and experience made her the top candidate to become the next SCU School of Engineering's dean.

Just about half-way into her first year at SCU, Dean Scott's leadership was put to the test as everyone around the world started to face the effects of the pandemic. With only a day's notice, the campus moved to a virtual format for classes and events. Under her guidance, the School was able to navigate a smooth transition into remote learning and working. Upon returning to on-campus instruction a year later, the School was

faced with yet another challenge with the School's relocation and opening of the Sobrato Campus for Discovery and Innovation. Dean Scott's leadership and ability to pivot helped the School overcome these challenges that came on so early in her tenure.

Despite these early tests of leadership, Dean Scott led an agenda that aimed to enhance the School's educational offerings, student experiences, and foster a more inclusive community. Her commitment to keeping the curriculum relevant is demonstrated with the addition of several new graduate programs. In order to help support students through their educational careers, she formed a partnership with Mentor Collective, facilitating meaningful relationships for students with alumni/ae mentors who are truly invested in their success. She worked diligently and successfully increased funding for graduate student assistants. Dean Scott created the engineering Faculty and Staff Councils and worked with them to develop the School's iCare Values—a code of conduct that outlines our behavior in fulfilling our values. Perhaps most notably, her vision for a more inclusive and equitable engineering community led to the creation of five new engineering scholarships aimed at providing an accessible education. She also supported the formation of DISC, the Diversity and Inclusion Student Center in STEM, along with the creation of two DEI focused staff and faculty positions.

Dean Scott not only reshaped the School's cultural and academic landscape with her initiatives, but also spurred growth in several key areas.

“Dean Scott is dedicated to creating a more diverse population of engineering professionals, and this is evident in our increased percentage of women engineering students,” explains Dr. Laura Doyle, Director of Assessment and Special Projects and of Frugal Innovation Hub, and Lecturer in Civil, Environmental and Sustainable Engineering. “This was only possible because Dean Scott committed to supporting the hiring and growth of women faculty.”

Over the course of her tenure, the School has experienced a significant increase in undergraduate engineering enrollment, including hitting a record breaking 36% of first-year women engineering students. Tenure and tenure-track faculty lines have also had a steady increase, with women engineering faculty growing from 34% to 37%. Another area of growth has been in fundraising, with the School seeing a major increase in the number of donations and total donation dollars, experiencing record-breaking Day of Giving totals and engagement for the past three years.

Through her notable actions, initiatives, and record numbers, Dean Elaine Scott leaves behind a legacy at the School of Engineering. She will be remembered not only for being the first woman dean at an institution that is well into its second century, but also for her resilience and her ability to pivot in times of uncertainty, her compassionate nature, and for her exceptional leadership. As the School of Engineering embarks on a new chapter, it carries forward the principles and values of Dean Scott that will continue to inspire innovation, inclusivity, and excellence for future generations of engineers and leaders.

A LEGACY OF PASSION: DR. TONYA NILSSON'S JOURNEY AT SCU (cont.)

"I really am driven by the recognition that I have an opportunity every time I walk into that classroom to make an impact, and I have to choose daily to make it positive," said Dr. Nilsson.

Dr. Nilsson's advocacy for inclusive teaching methods led her to develop hands-on curricula and collaborative approaches. These benefited underrepresented groups in engineering by offering activities appealing to a broad range of learners, beyond traditional lecturing. Her efforts not only helped close the performance gap for women students but also provided a supportive learning environment in her classroom.

"As a female, I have a real opportunity to be a role model and to represent—not only show them— what they're capable of, but also help break barriers in the minds of all the students," said Dr. Nilsson.

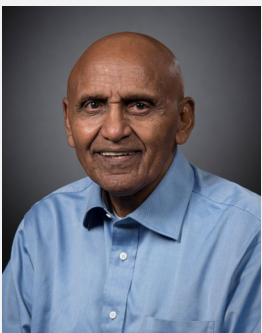
Throughout her time at SCU, Dr. Nilsson cherished her interactions with students, offering guidance and fostering

growth. She emphasized the importance of finding a supportive community where students could take risks, challenge themselves, and trust in a network that had their back.

"If you asked me what I thought of Santa Clara, I'd say that I'm grateful! I think I won the jackpot. The fact that I get to teach at a school that values growing as humans has been amazing. I'm supported in trying teaching methodologies and supporting the students, and I'm able to have such a great connection with them. I will miss it," said Dr. Nilsson.

Dr. Tonya Nilsson's impact on Santa Clara University's School of Engineering and its students will be remembered for years to come. Her legacy of dedication, passion, and unwavering commitment to creating a positive, inclusive learning environment will leave a lasting impression. Dr. Nilsson will soon depart to complete her final year in the SCU system before moving to Washington with her husband and their dog, Ollie, where they will enjoy a well-deserved retirement.

A LIFETIME OF DEDICATION: YOHANNES KAHSAI'S STORY AT SANTA CLARA UNIVERSITY



In February 1986, Yohannes Kahsai, Lab Manager for the Department of Electrical and Computer Engineering, embarked on a journey spanning an extraordinary 38 years at Santa Clara University. Now, at the age of 84, Yohannes is retiring from his role to dedicate time to his family and pursue his passions. Throughout his time at SCU, Yohannes became known for his

unwavering dedication, embodying a wealth of institutional wisdom, and demonstrating a consistent dedication to his role within the School of Engineering.

Starting as a lab technician, Yohannes quickly proved himself indispensable, showcasing not only technical prowess but also a profound dedication to his work. As the School of Engineering transformed in the late 1980s, particularly with the merger of computer engineering and electrical engineering departments, Yohannes found himself at the forefront of these changes. His ability to adapt to evolving dynamics and navigate uncharted waters spoke volumes of his technical acumen and leadership.

Backed by academic credentials, including a bachelor's degree in Electrical Engineering from Stony Brook State University and a master's degree in Engineering Management from Santa Clara University, Yohannes has established a

formidable foundation in electrical engineering. His prior experience as a manufacturing engineer has enriched his mentoring approach, infusing theoretical concepts with practical wisdom and real-world insights, transcending his impact beyond the lab. Through mentorship, particularly in senior design projects, he became a cornerstone of the student experience. Under his guidance, students not only honed their technical skills but also cultivated the confidence to tackle real-world engineering challenges.

Yohannes believes that a fulfilling life is built upon surrounding oneself with people who "make life easier."

For Yohannes, an immigrant from Eritrea, East Africa, Santa Clara University went beyond academics, "Santa Clara University has been more than an academic institution; it is a nurturing, familial environment where collaboration thrives and personal growth is nurtured." His unwavering dedication to fostering a positive workplace culture leaves an everlasting impression on the entire community.

As Yohannes embarks on new adventures, the School of Engineering and Santa Clara University extend their deepest gratitude for his years of service, his unwavering dedication, and his profound impact. Yohannes, we will miss seeing you taking your long walks around campus and you will always hold a special place in the heart of our institution, a symbol of excellence, mentorship, and the enduring spirit of Santa Clara University. Congratulations on your retirement, Yohannes!

ENHANCING SDN EFFICIENCY: INTRODUCING QUICSDN FOR IMPROVED SOUTHBOUND COMMUNICATION

As the diversity and quantity of devices connected to the Internet expand, the complexity of monitoring and configuring networks correspondingly escalates. In response to these burgeoning challenges, Software-defined Networking (SDN) has been deployed as a paradigm shift to imbue networks with centralized intelligence through the utilization of controllers. These controllers are tasked with the surveillance and administration of networking appliances, including but not limited to routers. While this architecture offers significant potential for evolving network management, it is crucial to address existing limitations such as the latency and communication overhead in the interactions between controllers and network appliances, known as southbound communication. Enhancing southbound communication is essential for developing dynamic, intelligent methodologies for managing next-generation networks.

Puneet Kumar, a Ph.D. student, under the mentorship of Dr. Behnam Dezfouli, Associate Professor in Computer Science and Engineering, has developed an innovative system to improve how network devices are monitored and configured. This system focuses on enhancing the communication protocol between controllers and network appliances. Their research indicates that the extensive programmability features in current network devices increase the need for robust southbound communication in SDNs. They highlight that such communication significantly raises the overhead of transport layer protocols, adversely affecting bandwidth utilization and network scalability.

In their research, Kumar and Dr. Dezfouli delve into the inefficiencies associated with southbound communication in SDNs, specifically from the transport layer's standpoint. The transport layer in computer networking plays a crucial role in ensuring that messages between machines are delivered reliably and in sequence. Currently, the Transmission Control Protocol (TCP) is the standard transport protocol for southbound communication in SDNs. However, through both analytical and empirical analysis, Kumar and Dr. Dezfouli demonstrate that TCP falls short in meeting the essential requirements for scalable and prompt southbound communication. Their findings suggest that the protocol's limitations significantly hinder its effectiveness in the context of SDN requirements.



In a collaborative venture with Santa Clara University and backed by Arista Networks, Kumar and Dr. Dezfouli have pioneered the quicSDN architecture. This innovation leverages the QUIC transport protocol to enhance southbound communication in SDNs. QUIC, a modern transport protocol recognized for its use across multiple applications, presents a novel approach to network communication. Nevertheless, integrating QUIC within SDNs necessitates a significant overhaul and redevelopment of key software components within both controllers and network appliances. This undertaking underscores the effort to align SDN infrastructure with the efficiency and performance capabilities offered by QUIC.

The comprehensive work involving the analysis, design, and implementation of the quicSDN system has led to the publication of a paper entitled "quicSDN: Transitioning from TCP to QUIC for southbound communication in software-defined networks." This publication marks a significant advancement in the field of networking technology. Through empirical evaluations carried out in diverse scenarios, the quicSDN system has shown to outperform traditional SDN architectures that use the TCP for southbound communication. These findings highlight the effectiveness and efficiency of quicSDN in enhancing network performance and reliability, setting a new benchmark for future SDN infrastructures.

With Puneet Kumar at the helm and Dr. Behnam Dezfouli providing expertise, this project signifies a promising step towards faster and more efficient communication solutions in networking. Leveraging QUIC capabilities and integrating them into advanced networking infrastructure can lead to improved user experiences via faster and more efficient monitoring and configuration of the network.

[Learn More](#)

DID YOU KNOW?

MECHANICAL ENGINEERING

Mechanical engineering offers diverse career paths across industries such as aerospace, automotive, biomedical, construction, energy, environmental engineering, manufacturing, metallurgical, materials, and robotics. In aerospace, they work on aircraft and spacecraft design. Meanwhile, in the automotive sector, engineers design vehicles and oversee production. Biomedical engineers develop medical devices, while construction engineers focus on building design (especially HVAC systems). Energy engineers contribute to renewable energy and power projects, and environmental engineers work on sustainability and pollution control. Additionally, manufacturing engineers optimize production processes and ensure quality control, while materials engineers specialize in material science. Lastly, in the field of robotics, they design automated systems. Overall, a degree in mechanical engineering opens doors to versatile roles in problem-solving and innovation across various sectors, making it consistently in high demand.

GENERAL ENGINEERING

General engineering encompasses a versatile array of disciplines, offering a comprehensive understanding of core engineering principles. It serves as a

gateway to multifaceted career opportunities spanning industries like manufacturing, construction, and engineering services. With a degree in general engineering, individuals can embark on dynamic career paths requiring technical proficiency

and engineering acumen. Roles such as development engineer, manufacturing engineer, and system design engineer are just a glimpse into the diverse spectrum of opportunities available. A general engineering degree unlocks a multitude of career avenues, utilizing technical proficiency and adept problem-solving across different industries throughout the country.

ALUMNI PROFILE



EDISON YANG

» Mechanical Engineering '22

» M.S. Aerospace Engineering '23

Edison Yang, the first graduate of the Aerospace Engineering Program at Santa Clara University, embarked on a journey fueled by a childhood fascination with science and aerospace. Inspired by his parents' positive experiences at SCU, he pursued his passion for control systems within the aerospace industry. With a background in mechanical engineering, Edison thrives in a supportive community, cherishing the collaborative environment that enhances his learning. Beyond academics, he values physical fitness and loves exploring the diverse food in the Bay Area. His journey exemplifies dedication, curiosity, and the transformative power of education, paving the way for future students aspiring to join the Aerospace Engineering program.

“My favorite thing about this program is definitely the people around me. I am surrounded by so many intelligent people every day, from professors to undergraduate students, that have helped reinforce my learning. I feel like I'm constantly learning, whether it be small coding tricks to conceptual topics that I may have had an incomplete understanding of, from others. I definitely think that what I have achieved is more of a testament to who I was able to work with throughout my time here and why I was able to stay on top of my work.”

AIAA AT SANTA CLARA UNIVERSITY

The student chapter of the American Institute of Aeronautics and Astronautics (AIAA) at Santa Clara University successfully held the AIAA Region VI Student Conference on March 23-24. The event drew approximately 200 participants, with a focus on student research presentations, and served as a celebration of knowledge for the next generation of leaders in the aerospace industry. The conference also featured insights from ten esteemed speakers from across the industry, fostering discussions about how future engineers will work to advance these industries to new heights. Networking opportunities abounded through lunches, tours, and workshops, allowing students to forge connections and share ideas. The agenda also included tours of NASA's Ames Research Center, SCU's Robotic Systems Laboratory, and the Hiller Aviation Museum. Additionally, attendees engaged in practical learning with laser cutters and 3D printers at SCU's Innovation Zone. The AIAA Region VI Student Conference at Santa Clara University was an engaging event that connected aspiring aerospace professionals and shared insights into the industry's future.

[Learn more about SCU's AIAA at our website.](#)



COSMIC ODYSSEY: KAMAK EBADI'S VIRTUAL JOURNEY TO THE RED PLANET

Santa Clara University (SCU) Alumnus, Kamak Ebadi, Ph.D. '20, embarked on his journey to work for NASA fueled by a powerful dream. Born during the 8-year-long Iran-Iraq war and raised in a country slowly recovering from its devastation, Kamak faced immense challenges. With Iran lacking diplomatic ties with the U.S. and financial obstacles making the idea of moving to the U.S. seem impossible, Kamak's dream of joining NASA appeared out of reach. However, undeterred by adversity, Kamak dared to dream big and set his sights on reaching for the stars.

To think that it was only five years ago that [“Reaching for the Stars, Powered by a Dream”](#) was featured in the Winter 2019 edition of *Engineering News* about Kamak's journey. Back then, he was a Ph.D. candidate studying robotics. Kamak's journey has truly come full circle: After years of hard work and overcoming challenges, he came to the U.S. on a student visa to pursue his passion. He obtained his Ph.D. in Electrical Engineering with a focus on robotics from SCU and received a postdoctoral fellowship with NASA's Jet Propulsion Laboratory at Caltech. This led to Kamak landing his dream job at the NASA Jet Propulsion Laboratory where as a robotics technologist, he has contributed to a variety of projects, including spaceflight operations for NASA's Perseverance rover on Mars. Recently, he returned from a 45-day simulated journey to the red planet, Mars—an experience that only a very few people get to share in their lifetime.



After undergoing a rigorous year-long process of technical, physical, and psychological screenings and evaluations, Kamak was selected by NASA as an analog astronaut for a simulated round-trip journey to Mars. Following weeks of intensive training and preparation, Kamak and his three crewmates honed their skills, familiarized themselves with spacecraft systems, and engaged in 18 scientific and technological studies. During their training, they were acutely aware that each moment of preparation brought them closer to this remarkable simulated journey to Mars. However, Kamak knew that leaving home would be challenging, given the simulated communication delays and limited contact with the outside world, especially with his then 3-month-old daughter.



Life within the simulated spacecraft posed challenges for Kamak and his crewmates, including isolation in a confined and small space without access to the outside world, internet, natural daylight, and fresh food. They worked rigorous 16-hour days, performing spacecraft operations, maintenance, anomaly responses, and scientific studies, while also managing exercise and personal hygiene. They even experienced

virtual spacewalks using NASA's high-fidelity VR headsets. Despite these constraints, strong camaraderie flourished among the astronauts, united by shared experiences and a collective purpose.

As time went on, Kamak observed transformations in both himself and his fellow crewmates. They grew increasingly resilient, adaptable, and adept in communication and teamwork, becoming better equipped to face the challenges of life in space. Ongoing brain and heart monitoring, combined with surveys and comprehensive cognitive evaluations, yielded important insights into the psychological and physiological impact of isolation and confinement. These insights will help deepen NASA's understanding of how to support astronauts during long-duration missions.

Throughout the journey, Kamak has remained unwavering in pursuit of his ultimate aspiration—to become an astronaut and explore the cosmos. He recognizes that the road ahead will be fraught with trials and tribulations, yet he embraces each challenge with fortitude and resilience. Reflecting on his journey—from nurturing dreams of the stars as a teenager in Iran to contributing to the operation of NASA's Perseverance rover mission on Mars—Kamak affirms that every sacrifice has been worthwhile. As he now prepares to apply for NASA's astronaut program, it's evident that each challenge he has faced serves as a stepping stone, propelling him closer to his goal of joining the elite ranks of astronauts.



Kamak's advice to those aspiring to follow in his path echoes the sentiment of Theodore Roosevelt's, 'Dare mighty things, "Dream audaciously, plan meticulously, and be prepared to sacrifice along the journey. But above all, enjoy the journey and not just the destination."



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SEE THE CAMPUS THROUGH NATIVE EYES: THE LAUNCH OF THE THÁMIEN OHLONE AUGMENTED REALITY TOUR

On May 4, 2024, a collaborative group of Santa Clara University faculty, students, and members of the Muwekma Ohlone Tribe unveiled the public launch of the Thámién Ohlone Augmented Reality Tour at the university's annual Pow Wow, gathering of Native Americans from across the region. This innovative tour offers an immersive experience, enabling visitors to explore the historical campus through the lens of the Ohlone people. Using augmented reality technology, the tour reveals hidden aspects of the site's history, sparks critical reflection, and fosters a vision of just future relations. Highlights of the tour include a new tribute to Ohlone ancestors, with captivating visuals inspired by Ohlone artwork. The tour will be a permanent feature, accessible to all campus visitors.

The interdisciplinary team behind this initiative includes students (Cintha Jauregui '22, M.S. '24; Tiffany Nguyen '26; Mohan Raj Chandrasekar '24; Sarah Hazel Sallee '25; Liam A'Hearn '24; Dominic Woetzel '25; Madison Nguyen '25; Aryan Bagade '25; Brian Khuu '25; Isabella 'Amne Gomez '27; Xinqi Zhang '28) and faculty (Dr. Kai Lukoff; Dr. Amy Lueck; Dr. Lee Panich; Danielle Heitmuller) working alongside partners at the Muwekma Ohlone Tribe. This event was built upon a successful beta version of the tour launched on Indigenous People's Day in 2023, showcasing a significant step in acknowledging and celebrating the heritage of the Ohlone people.



Faculty and students at Santa Clara University and members of the Muwekma Ohlone Tribe collaborate to design the augmented reality tour.