

## WELCOME



## Welcome from Dean Sheryl Ehrman

Welcome, scholars and sponsors!

Students, you made a wise decision to pursue your academic explorations at the Charles W. Davidson College of Engineering at San José State University.

We are here to support your growth both as an engineer and as a well-rounded, engaged citizen. We celebrate your accomplishments and look forward to traveling with you on the road ahead. Our goal is to make SJSU a platform from which you can launch anywhere, whether you go on to a graduate program or a career with an established company, or create a new start-up.

Sponsors and donors, you have our heartfelt appreciation for supporting the dreams and aspirations of these inspiring students. Your generosity helps support our mission: to prepare engineering students to fully contribute to the innovation, entrepreneurship and leadership of Silicon Valley and beyond. We truly appreciate your commitment.

## Sheryl Ehrman

Don Beall Dean Charles W. Davidson College of Engineering

## SCHOLARSHIP RECOGNITION PROGRAM

November 8, 2019

11:30 am — 2:00 pm

11:30 Registration & Appetizer Reception

12:00 Program

12:30 Luncheon

Welcome Remarks

**Dr. Sheryl Ehrman**Don Beall Dean
Charles W. Davidson College
of Engineering

Scholarship Sponsor Speaker

**Dana Ditmore**Ditmore Family Endowment

Scholarship Speakers

**Wyatt Goodsite** *Samsung Scholar* 

Vanessa Aldaz National Action Council for Minorities in Engineering Scholar

## **SPEAKERS**



**Keynote: Dana Ditmore** *President, Oak Valley Consulting, Inc. Ditmore Family Endowment* 

Dana has more than twenty-five years of senior management experience in high technology environments, including general management, engineering, quality, procurement and human resources. His professional experience has been dominated by opportunities to grow and develop profitable, well-managed business units providing vision and leadership, while managing the balance between strong customer focus and responsible financial performance. His senior management experiences have included global responsibility for operations throughout Asia, Europe and North America with General Electric, Applied Materials and Lam Research.

Dana's corporate career experience has included seventeen years in various engineering management roles with GE Nuclear, another seventeen years as Vice President with Applied Materials, two years as a contract executive and Vice President with Lam Research, two years as a contract executive and President with Tru-Si Technologies, and twenty-three years as President of Oak Valley Consulting. Dana's experience also includes more than thirty years of participating as an active member of multiple for-profit and not-for-profit corporate boards of directors.

Dana has a long history of involvement with the Davidson College of Engineering dating to the mid-1980s. He has been a member of the SJSU Research Foundation Board and is currently on the SJSU Tower Foundation Board.

## 2019 - 2020 SCHOLARS

## Akin Family Scholar

Alfonso De La Rosa

## **Benzing Family Fellows**

Jinann Alzaghari Jordan Dye

#### California Homebuilding Foundation – Don Babbitt Scholars

Ian Boisseree Christopher Ferrel Danny Nguyenpham Tobey Nguyen

#### Cadence Scholar

Syeda Sheherbano Rizvi

## **Ching Family Scholar**

Ameen Saleminik

# David A. Brown Endowment Scholars

Nadia Allaf

Rusiru Gunawardena

# Ditmore Family Endowment Scholar

Steven Nguyen

# Emma Legg Endowment Scholars

Jackie Kuang Shivani Sharma

## Harry Wong Endowment-Scholars

Jacob Timothy David Zachary DeBuhr Cooper Gable Joel Lucatero Lorenzo Marquez-Ortiz

#### Jane Evans Endowment Scholars

Jared Arroyo-Garcia Julian Columbres Elisa Parent Vennis Tinaco Bella Ying Wei

## **KLA-Tencor Scholar**

Sophie Chen

## Lam Research Scholar

Christian Sy

## Steven Meacham Memorial Scholar

Montgomery Perry

#### MEP Scholar

Ezhioghode Uwadiale

#### **Munson Family Scholars**

Kyle Carter Diana Knobler Julia Marie Gosiengfiao

# National Action Council for Minorities in Engineering Scholars

Luis Aguilar Vanessa Aldaz Mawuto Attiogbe Antonio Gonzalez Fuentes Belia Iniguez Marvin Pablo Perez

#### Roelandts Foundation Scholar

Christopher Tran

## Samsung Scholars

Wyatt Goodsite Sarah Walker

#### **SVES Fund Scholars**

Antonio Gonzalez Fuentes Kaeleen Sapelli Ryan Wade

## National Science Foundation Engineering Leadership Pathway Scholars

Anique Davla Andy Ma

## National Science Foundation Engineering Leadership Pathway Faculty Mentor

Thalia Anagnos

#### AKIN FAMILY SCHOLAR



Alfonso Chavarria De La Rosa Mechanical Engineering, Class of 2020

"Being a member of SOLES (Society of Latino Engineers and Scientists) not only gave me the resources to succeed but also the chance give back to our community. For example, we host afternoon workshops and an annual festival for middle school students from low-income communities. I am not the president of the club nor any of the facilitators, but I show up because I know how much these activities mean to our community."

DON BABBIT VIA
CALIFORNIA HOMEBUILDING FOUNDATION
SCHOLAR



lan Boisseree | Civil Engineering, Class of 2019

"I'm an officer in Chi Epsilon and a construction team member in Concrete Canoe. Chi Epsilon allows me to improve my leadership abilities. Concrete Canoe allows me to work with my hands and see the things that I've learned in school put into practice."

BENZING FAMILY FELLOW



Jinann Alzaghari Chemical Engineering, Class of 2022

"I chose to attend the College of Engineering at SJSU because of the great leaders and intellectual minds that have been involved with this institution and their contribution to the innovation and scientific advancements of the communities around the university. I hope to change the world by using my passion; my work ethic; and my background as a Muslim, Palestinian-American woman to provide a unique perspective and inspire those around me to achieve success."

#### BENZING FAMILY FELLOW



Jordan Dye | Chemical Engineering, Class of 2020

"The most valuable thing I learned during my internship at Amgen was that the more you try to learn and grow, the more you can achieve. What really sets you apart is how much you try to go above and beyond what your job requires of you."

#### CHING FAMILY SCHOLAR



Ameen Saleminik | Computer Engineering, Class of 2020

"I hope to create a wearable smart-watch that can accurately detect signs of an irregular heartbeat and can detect a stroke. In my EE 98H honors class, we created an ECG circuit that detected heartbeats - ever since then, I have been fascinated by the idea of using my knowledge to create a device that can help people."

#### CADENCE SCHOLAR

Syeda Rizvi | Electrical Engineering, Class of 2019

"I work at NXP Semiconductors, San José, in the Automotive Department with the Field Applications Team. Over the summer, I participated in defining the system safety concept of an Inverter that is used in electric vehicles. I value that experience because I got to learn an immense amount and at the same time contribute to a design that would directly impact the drivers' safety."



#### DITMORE FAMILY ENDOWMENT SCHOLAR



Steven Nguyen | Mechanical Engineering, Class of 2020

"Being a recipient of this scholarship allows me to engage with the scholar community where I can meet many other intelligent engineers. I hope to contribute my knowledge toward the innovation of technology that will make the world to a better place to live."

#### EMMA LEGG ENDOWMENT SCHOLARS



Jackie Kuang | Aviation, Class of 2020

"The best class project I worked on was building a radio from scratch. The process of putting together the radio was lengthy, but when the radio was complete and functional, it was very rewarding."



Shivani Sharma I Aerospace Engineering, Class of 2022

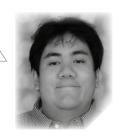
"I chose SJSU engineering because not only did I feel welcome, I felt at home.

Engineering for me is important because as engineers we have a chance to directly affect the world with what we make or do. Also, at SJSU I felt a sense of empowerment from the very beginning because here, the staff and professors show that they want their students to succeed."

#### HARRY WONG ENDOWMENT SCHOLARS

Jacob T. David | Software Engineering, Class of 2020

"In one project for Engineering 100W, we researched issues in sustainability. My group was focused on food waste, and my topic was residential food waste. This project was one of the best for me because it helped open my eyes to current environmental and social issues. As engineers, we are often solving many problems that are a threat to society or our environment. Although it may be great to develop the most fanciful or groundbreaking algorithms, care must be taken as to not warp our surroundings negatively."





Cooper Gable | Chemical Engineering, Class of 2022

"I would love to develop a new type of effective biofuel or improve on the current capabilities of batteries – specifically, batteries for cars. A major goal of mine is to design batteries that are not as toxic as they typically are; mainly so that they are much more easily disposable after they are depleted."

Zachary DeBuhr | Mechanical Engineering, Class of 2023

"My dream job is to work for a Works Le Mans racing team as a designer, because racing is my favorite sport and I haven't changed my mind in a long time about what I want to do with my life. In my career, I hope to have my name remembered and to be an example in the engineering world."



#### HARRY WONG ENDOWMENT SCHOLAR



Joel Lucatero | Aerospace Engineering, Class of 2021

"I am a member of SEDS (Students for the Exploration and Development of Space). The club decided to take on the Base 11 project, which is a competition between institutions across the country to design, build, and launch a liquid-fueled rocket to a height of 100 km. This project is a very challenging one, but it's also fun and enlightening."

#### KLA-TENCOR SCHOLAR

Sophie Chen | Software Engineering, Class of 2020

"The best class project I have worked on is the robot my team and I developed for the Global Technology Institute program. Based on the topic of development of a vision-based interactive multimedia system, we built an interactive robot designed to respond to gestures performed by the user. To do this, our team implemented Kinect's gesture recognition feature; the information collection is then sent to the robot through Wi-Fi. This project at first seemed impossible to complete, since we only had three weeks to do so and we were a team of six people, all from different countries. Not only were we unfamiliar with each other, we also had to overcome the language barrier. Through this project, I gained teamwork skills and practical engineering experience."



#### JANE EVANS ENDOWMENT SCHOLARS

Julian Columbres | Electrical Engineering, Class of 2023

"My best class project was creating a physical launcher and using code to show how far a golf ball would be launched depending on the angle of release. I found it interesting being able to work both physically and through software in order to perfect my design."





Jared Arroyo-Garcia | Computer Engineering, Class of 2020

"This summer I was a hardware engineer intern at Intel. The most memorable thing about my time at Intel was being able to lead my own project with the help of my team. I was able to design, assemble, and test my own daughter card that will be used in future projects. Not only did I strengthen my hardware engineering skills, I also gained experience in project management."



Vennis Tinaco | Electrical Engineering, Class of 2022

"During my first year of college it was difficult for me to meet new people. By joining the Vietnamese Student Association, I was able to interact with more people and develop my ability to communicate and introduce myself. This was a challenge since I am fairly introverted, but the opportunity to practice interacting with new people will help when it comes to networking."

#### JANE EVANS ENDOWMENT SCHOLARS

Elisa Parent | Electrical Engineering, Class of 2021

"I am an officer in IEEE, and I help to make sure that EE students feel that they are welcomed in the room and have a safe space to study."

Bella Ying Wei | Software Engineering, Class of 2019

"I want to be an Engineer because I think Engineers have the potential for building a better world. As a female student major in Software engineering, I hear doubts from others all the time. Hopefully, my story can motivate more female students who want to study Engineering in the future. I understand how technology has changed people's lives. I want to become the part of making differences for this world"

#### STEVEN MEACHAM MEMORIAL SCHOLAR

Montgomery Perry | Mechanical Engineering, Class of 2020

"This scholarship provided me the opportunity to focus on my last year of school full time. Previously I spent most my college career both working full time in the industry and studying full time. While I am proud of my success, it required many difficult sacrifices. As a result of fewer obligations, I had the opportunity to spend some time backpacking across Southeast Asia this summer. It was an experience I will never forget. I look forward to going into my final year with a clear head and ready to start the next chapter of my life."



#### MESA ENGINEERING PROGRAM SCHOLAR

## Ezhioghode Uwadiale | Chemical Engineering, Class of 2023

"I chose SJSU because when I had visited the campus, everybody was friendly and the community of professors and professionals was comforting and welcoming. I chose engineering because I was involved in Mathematics Engineering Science Achievement (MESA) program in middle and high school and enjoyed the activities we did in the club. Also in high school I was a part of the Project Lead The Way (PLTW) program, a four year engineering program that emphasized different aspects of engineering every year, which I enjoyed and excelled in."



#### MUNSON FAMILY SCHOLARS



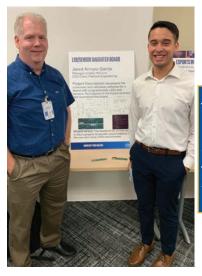
## Julia Marie Gosiengfiao | Civil Engineering, Class of 2022

"One thing that this scholarship has allowed me to do is to branch out and meet people who have truly impacted this field. By talking to these people, I'm able to not only learn more about my major, but listen to advice on how to succeed."

Diana Knobler | Biomedical Engineering, Class of 2022

"As the daughter of a cancer survivor, I was able to see firsthand the equipment and procedures in today's medical industry that are in need of improvement. I chose engineering and my major with the intent of taking those challenges on."





Jared Arroyo-Garcia and his manager at an Intel showcase event, where Jared presented his summer project to the organization.



The Beta Upsilon Chapter of Alpha Omega Epsilon, Engineering MESA Engineering Program threw a STEM outreach event for mi (standing, 2nd from left) belongs to all three groups and helped to



Anique Davla gave his father a tour of NASA Ames Research Center during Anique's internship there.



Jinnan Alzaghari rocked her protective equipment in a research lab at SJSU.



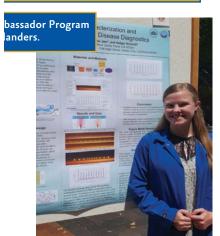






Top: Kaeleen Sapelli went to Northrop Grumman to see the James Webb Space Telescope and hear the Project Lead's presentation.

Bottom: Ezzie Uwadiale (front and center), a member of the Black Alliance of Scientists & Engineers board, smiled with other members at the annual Conference for Diversity in Engineering.



Sarah Walker stood with her research poster after a summer research experience (REU) at UC Santa Cruz.



#### NATIONAL ACTION COUNCIL FOR MINORITIES IN ENGINEERING (NACME) SCHOLARS

Belia Iniguez | Industrial & Systems Engineering, Class of 2020

"Growing up I was always drawn to STEM clubs, and in high school I was in Techbridge (a STEM club for girls) and part of the engineering academy offered at my school. There I discovered a passion for engineering. I then interned at Girls Who Code, where I learned more about the lack of women representation in STEM. I was empowered and made it a goal of mine to change that. San José State was the community for that, as everyone is like a family, there is an abundance of culture, and it is the perfect place for professional and personal growth. San José State has state-of-the-art engineering programs, and being in the heart of Silicon Valley is ideal for my career goals. However, coming from schools in underrepresented communities, if I hadn't been exposed to these clubs in high school I wouldn't have known of the opportunities the world has to offer to us. This is why I find it important to share back with the younger students what we can do in this world of STEM!"





Vanessa Aldaz | Biomedical Engineering, Class of 2020

"I am excited to be graduating in Biomedical Engineering with a focus in tissue/genetic engineering and regenerative medicine. My goal before graduation is to be accepted into a PREP program, where I can extensively be in a research lab that focuses in tissue engineering. After being in the PREP program for a year, I will have a much stronger profile in the research realm and can apply to school for a MD/PHD program in Biomedical Engineering. I am still unsure if I want to become a professor, but I do know I want to be doing research and make new medical application discoveries."



## Luis Alfredo Aguilar Ochoa | Mechanical Engineering, Class of 2020

"This scholarship helped me develop communication and leadership skills by allowing me to focus more on my academics and extracurricular activities inside and outside SJSU. I was able to tutor for low-income schools in San José which has been a life changing experience. I was also able to take leadership positions in the Society of Latino Engineers and Scientists (SOLES) at SJSU and in Juventud Franciscana (JuFra), a youth group at Our Lady of Guadalupe Church. Not to mention that I've gotten to spend more time with my family!"

## Mawuto Attiogbe | Mechanical Engineering, Class of 2020

"We are still working on this project for the senior project class (Spartan Hyperloop Braking System) but by far it's the best project I've worked on. I like the project because of its complexities, and also how it requires the collaboration of all teams from different engineering backgrounds in order to come up with a successful product. Moreover, this project is for a competition taking place next year, which means that we are under a time constraint."



## Marvin A. Pablo Perez | Mechanical Engineering, Class of 2020

"I was raised in a small village, so I wanted to experience the living conditions in a big city. There were many cities to choose from, but since I wanted to facilitate a little more the work conditions in my village I chose engineering as my major and SJSU ended up being a good fit. Now that I have experienced both lifestyles and gained the proper experience, after graduation I hope to help my village by providing solutions without the negative side-effects that such solutions will create once the village becomes a big city."



#### LAM RESEARCH SCHOLAR



Christian Sy | Chemical Engineering, Class of 2020

"This scholarship has allowed my family to financially support my other siblings in their endeavor for higher education. I have two brothers who are also going to college, and my family would not have been able to help pay for their tuition fees. The scholarship also allows me to continue to build my network by joining Greek Life, and to stay physically fit by playing roller hockey with the SJSU Roller Hockey Club."

#### ROELANDTS FAMILY SCHOLAR



Christopher Tran | Materials Engineering, Class of 2020

"I was studying abroad in spring and summer of 2019 where I conducted research on the next generation of fuel cells in Japan. My project goal was looking into increasing catalytic reaction in polymer exchange membrane fuel cells. The experience taught me a lot about ceramic-based catalysts aside from what I learned in class. I also learned to communicate with and learn from students in another country. Although I do not speak Japanese fluently, we could communicate at a basic level. Throughout the four months I spent in Japan, I learned how differently academic research is conducted there, and what is expected of students. This experience definitely taught me a lot academically and culturally."

#### SAMSUNG SCHOLARS



Wyatt Goodsite | Industrial & Systems Engineering, Class of 2020

"My dream job is to start my own company that will drive the next industrial revolution, which is definitely approaching. As new technologies change the way in which many industries function, there will be a need for new organizations to lead the pack in uncharted areas, which will create many new industries that my generation will be the first to create. I hope to change the way in which the global manufacturing and recycling infrastructure works and how it affects our global ecosystem."



Sarah Walker | Electrical Engineering, Class of 2020

"I remember how excited I was when I first received a notification from the scholarship committee requesting an interview, as well as the level of enthusiasm when I was awarded this scholarship. I was transferring from a community college with approximately five thousand students, to San José State University with thirty thousand students. I initially felt like a small fish in a big pond. This scholarship gave me the confidence to realize that even though I may be one student out of thirty thousand, I can still stand out, be an example for those around me and make a difference. I am now a part of a community working towards similar goals, and ultimately, this scholarship empowers me to continue striving for success, knowing that I have the College of Engineering, the scholarship committee, and the scholarship donors believing in me."

#### SVES FUND SCHOLARS



Ryan Wade | Civil Engineering, Class of 2020

"I am currently one of the project managers for the Concrete Canoe team and an officer for Chi Epsilon, the civil engineering honor society. I enjoy the clubs because of the networking opportunities and the ability to meet new people within my major. Canoe can be especially difficult at times, because of its uncanny tendency to have problems suddenly arise that need to be dealt with in the heat of the moment."

#### Antonio Gonzalez Fuentes | Mechanical Engineering, Class of 2020

"I am a member of the Society of Latino Engineers and Scientists, and also Science Extravaganza. What I really like about these clubs is that their missions are focused on helping the community with persevering in STEM."





Kaeleen "Scooter" Sapelli | Aerospce Engineering, Class of 2023

"I chose engineering because it has always been something I was interested in, even before I knew that was what it was called. I loved to build things, take them apart and usually put them back together much to my parents' enjoyment. As I got older I really fell in love with it. There is so much that can be done that needs doing, the possibilities are endless."

## NATIONAL SCIENCE FOUNDATION ENGINEERING LEADERSHIP PATHWAY SCHOLARS

Andy Ma | Electrical Engineering, Class of 2019

"The SVES and ELPS scholarship has allowed me to pursue opportunities that I would have never been able to achieve without its help. I was able to focus more on school and also able to spend more time in my internships. I was able to intern at AsteelFlash and Blue Clover Devices over the summer without having to worry about the financial burden of education."



#### Anique Davla | Sofware Engineering, Class of 2019

"My dream job would be to work on a field intersecting between medicine, robotics and software. I have always enjoyed building robots for competitions in high school. I still read and educate myself with technology in the field. Studying software engineering at SJSU and interning in the Valley has prepared me to write good software. I have been following many medical device companies and love the field as it requires a lot of important innovation. I hope my career can contribute to enhance this field and push it forward."

#### DAVID A. BROWN ENDOWMENT SCHOLAR

Rusiru Gunawardena | Mechanical Engineering, Class of 2019

"This fellowship has allowed me reach out of my comfort zone and to help other mechanical engineering students learn mechatronics by becoming a lab instructor. I would have never thought to go into a teaching/instructional role but helping fellow students is very rewarding."



#### STUDENT CLUBS AND ORGANIZATIONS

More than 60 organizations affiliated with the College of Engineering exist to provide students with opportunities for networking, leadership, teamwork, professional development, hands-on experience and community building.

**Discipline Based** — These groups are tied to a specific major or industry and often are student chapters of well-established professional associations.

- 2019 ASCE MIDPAC
- American Concrete Institute
- American Institute of Aeronautics & Astronautics
- American Institute of Chemical Engineers
- American Society of Civil Engineers
- American Society of Mechanical Engineers
- Biomedical Engineering Society
- BMEidea
- Design Flight Team
- Human Factors and Ergonomics Society
- Institute of Electrical & Electronic Engineers
- IEEE Electronics Packaging Society and Computer Society
- Institute of Industrial & Systems Engineers
- Institute of Transportation Engineers
- Int'l Society of Pharmaceutical Engineers
- Material Advantage

- Robotic Applications Society
- Software and Computer Engineering Society
- Society of Automotive Engineers Int'l
- Society of Plastic Engineers
- Students for the Exploration and Development of Space
- User Experience Association

## Project/Activity/Competition Based —

These groups generally focus on a physical task or project, often competing with other schools.

- Advanced Space Exploration
- Affordable Engineering Design and Development
- Amateur Radio Club
- Concrete Canoe Team
- Cube<sup>3</sup>
- Daedalus Rocket Engineering and Manufacturing
- Design Build Fly at SJSU
- Hoplite
- IDEAS at SJSU
- Rocket Club

#### STUDENT CLUBS AND ORGANIZATIONS

- SJSU Robotics
- SAE Baja Vehicle
- SAE Formula Vehicle
- SAE Electric Vehicle
- Science Extravaganza
- SJSU Precision Flight Team
- Spartan Hyperloop
- Spartan Mechanical Engineers
- Spartan Organization for Astronautical Research (SOAR)
- Spartan Superway
- Steel Bridge Team

**Interest Based** — These groups center on a shared experience and/or interest.

- Black Alliance of Scientists and Engineers
- Bridge Engineering Student Transition Team
- Computer Electronics and Networking Technology Club
- Engineering Ambassador Program
- Engineers Without Borders
- Girls Who Code Loop

- New Heights
- Silicon Valley Engineers SJ Hacks
- Society of Asian Scientists and Engineers
- Society of Latino Engineers and Scientists
- Society of Women Engineers
- Startup Grind SJSU
- STEM NOW
- Veterans Student Organization
- Women in Aviation

**Honorary/Professional** — These groups recognize strong academic performance and/or commitment to a specific field.

- Alpha Eta Rho, Aviation Fraternity
- Chi Epsilon, Civil Engineering Honor Society
- Colony of Alpha Omega Epsilon
- Eta Kappa Nu
- Pi Tau Sigma, Mechanical Engineering Honor Society
- Sigma Gamma Tau, Aerospace Engineering Honor Society
- Tau Beta Pi, Engineering Honor Society

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