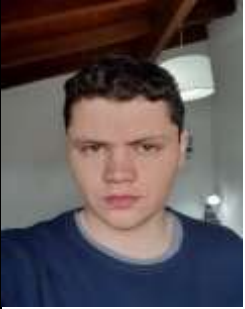





## Brief Biography of Student Representative of 2019

Country/Region	Argentina	
Name of Student Rep	Federico Emmanuel Collado	
University/College	Universidad Tecnológica Nacional – Facultad Regional Córdoba (National Technological University – Córdoba Regional Faculty)	
Email Address	fedeemcollado@gmail.com	
		Portrait
Brief Biography	<p>I am an Electronics Engineering Student from the National Technological University of Córdoba, Argentina, member of the Robotics Club of this University and students representative candidate for the Preparatory Committee for UNISEC Argentina. As robotics club and UNISEC-Global member my main interest is promoting Space Engineering education and Open Source philosophy in my Country/Region. By these means, we developed an educative Cubesat model called Cor-E Sat and recently launched an Academic Space Development Program proposal at the Open Source Cubesat Workshop in Athens, Greece.</p>	
Research Interests	<p>I am interested in Satellite technologies, as communications and on-board computer. At the moment starting with the development of a Cubesat for the Open Space satellite competition in collaboration with Space Engineering Students from San Martin University of Buenos Aires.</p>	
Hobby	<p>Martial arts, music and literature.</p>	


Country/Region	Colombia	Portrait 
Name of Student Rep	Alvin David Gregory Tatis	
University/College	Universidad de los Andes (Los Andes University)	
Email Address	ad.gregory@uniandes.edu.co	
Brief Biography	<p>Alvin Gregory is currently doing his bachelor's degree in Electronic and Biomedical Engineering. Since 2019 he joined the FabSpace 2.0 consortium, which is an open network for the access of geospatial data provided by SENTINEL satellite constellation. Alvin is the president of the IEEE Aerospace and Electronic Systems Society (AESS) chapter at Uniandes, in which works in cooperation with other Colombian universities, the Colombian Air Force and the government for the creation of the Colombian Aerospace Consortium.</p> <p>His theme for graduation thesis is based on natural disaster prediction using local data and satellite images; specifically, prediction of level of rivers based on hydrometeorological conditions, to establish a model able to predict a river level some days in advance.</p> <p>Additionally, in cooperation with UNISEC and the Colombian AESS president, we want to design a satellite course, which main purpose is to bring the space to the hands of everyone, enabling the development of space-based projects, and improving societies' life style.</p>	
Research Interests	<ul style="list-style-type: none"> <li>• Video and Image processing.</li> <li>• Satellite design and construction.</li> <li>• Machine Learning</li> </ul>	
Hobby	<ul style="list-style-type: none"> <li>● Practicing soccer.</li> <li>● Flying aircrafts in simulators.</li> <li>● Playing table tennis.</li> </ul>	

Country/Region	<b>Egypt</b>	 <p>Portrait</p>
Name of Student Rep	<b>Mohamed Elsherbiny Emam</b>	
University/College	<b>Cairo University / Aerospace Engineering department</b>	
Email Address	<b>Mohamed_El_Sherbiny@yahoo.com</b>	
Brief Biography	<p><b>Academic background:</b></p> <ul style="list-style-type: none"> <li>- Forth year student at Aerospace Department, Cairo University.</li> </ul> <p><b>Work and Research Experience:</b></p> <ul style="list-style-type: none"> <li>- Participated in an international space competition ARLISS (A Rocket Launch for International Student Satellites) in the comeback category.</li> <li>- Worked with a research group on Attitude Determination and Control Systems problems in Satellites (Gyro errors)</li> <li>- Worked with a research group in mission analysis and design of a small satellite for Remote Sensing Applications.</li> <li>- Worked in designing, testing and fabricating of a Cansat.</li> <li>- Worked with a team in a Solar Electric Vehicle project (I was responsible</li> <li>- Worked with a team in a design UAV project in UDC (Unmanned Aerial Development Center). Made a RC airplane in a UDC build and fly competition.</li> </ul> <p><b>Theme for graduation thesis</b></p> <ul style="list-style-type: none"> <li>- My graduation thesis will be “design, fabricate and test of medical rescue quad-plane”.</li> </ul> <p><b>What I want to do for promoting my county’s space activity</b></p> <ul style="list-style-type: none"> <li>- Provide opportunities for the university students to acquire the space engineering technology and utilize space to overcome our national challenges</li> <li>- Perform regional research center of excellence in the design, fabrication and operation of space systems and produce an excellent space engineers.</li> <li>- Encourages undergraduate students to participate in international space competitions.</li> <li>- Making simple sessions and projects about space applications for students in high schools will encourage them to study aerospace by entering the AE department.</li> </ul>	
Research Interests	<ul style="list-style-type: none"> <li>- CubeSat Design</li> <li>- Mars Rover Design</li> <li>- CanSat Activity</li> </ul>	

Country/Region	<b>Egypt</b>	 <p>Portrait</p>
Name of Student Rep	<b>Mohamed Magdy Ahmed</b>	
University/College	<b>Cairo University / Aerospace Engineering department</b>	
Email Address	<b>Mohamed_magdi2030@yahoo.com</b>	
Brief Biography	<p><b>Academic background:</b></p> <ul style="list-style-type: none"> <li>- - Forth year student at Aerospace Department, Cairo University.</li> </ul> <p><b>Work and Research Experience:</b></p> <ul style="list-style-type: none"> <li>- Participating in the international space competition ARLISS (A Rocket Launch for International Student Satellites) in the comeback category.</li> <li>- Worked with a research group in mission analysis and design of a small satellite for Remote Sensing Applications.</li> <li>- Worked with a team in designing a Flying Wing UAV Powered by Solar Energy (I was responsible for Solar Power Subsystem).</li> <li>- Worked in designing, testing and fabricating of a Cansat.</li> <li>- Worked with a team in designing UAV project in UDC _ Unmanned Aerial Development Center. Made a RC airplane in a UDC build and fly competition.</li> </ul> <p><b>Theme for graduation thesis:</b></p> <ul style="list-style-type: none"> <li>- My graduation thesis will be “design, fabricate and test of 1 U CubeSat for Remote Sensing Applications”.</li> </ul> <p><b>What I want to do for promoting my county’s space activity:</b></p> <ul style="list-style-type: none"> <li>- Spread the importance of the space applications by making educational events to the undergraduate students.</li> <li>- Making undergraduate space project such as Cube-sats, Can-sats, Rovers, Quad-copters and Rockets will be a powerful tool to make the students engaged to space activities and qualified to work in space industry after the university.</li> <li>- Encourages undergraduate students to participate in international space competitions.</li> <li>- Making simple sessions and projects about space applications for students in high schools will encourage them to study aerospace by entering the AE department.</li> </ul>	
Research Interests	<ul style="list-style-type: none"> <li>- CubeSat Design</li> <li>- Mars Rover Design</li> <li>- CanSat Activity</li> </ul>	


Country/Region	<b>INDIA</b>	 <p>Portrait</p>
Name of Student Rep	<b>NIKHIL RIYAZ</b>	
University/College	<b>NEW HORIZON COLLEGE OF ENGINEERING</b>	
Email Address	<b>nikhilryz@gmail.com</b>	
Brief Biography	<p><b>Nikhil Riyaz did his bachelors in Electronics and Communication Engineering in New Horizon College of Engineering (NHCE). He is Founder and COO of a Startup, 'Tesseract Space' based in India. He is currently a Research Engineer at NHCE, Bangalore. He is the First Students' Representative of UNISEC India and participated in 6th UNIGLO at International Space University, Strasbourg, France and also an active Member of India's 75 Students' Satellite Consortium. He has been Working on small satellite development for the past 3 years. His major contribution towards New-Space has been the research and development of ultra low cost Cubesat and CaSat Subsystems.</b></p>	
Research Interests	<ul style="list-style-type: none"> <li>● <b>Satellite Structural Design</b></li> <li>● <b>Low-Cost Satellite Subsystem Development</b></li> <li>● <b>CanSat Development</b></li> <li>● <b>Low-altitude Rocket design</b></li> <li>● <b>Assistive Robotics</b></li> </ul>	
Hobby	<ul style="list-style-type: none"> <li>● <b>Ammature Rocketry</b></li> <li>● <b>HAM Radio</b></li> <li>● <b>Rapid Prototyping</b></li> <li>● <b>Robotics</b></li> </ul>	


Country/Region	Italy	
Name of Student Rep	Paolo Marzioli	
University/College	Sapienza University of Rome	
Email Address	paolo.marzioli@uniroma1.it	
Brief Biography	<p>Paolo Marzioli is a PhD Student in Aeronautical and Space Engineering at Sapienza University of Rome, Italy. He obtained his BSc in aerospace engineering in 2014 and his MSc in aeronautical engineering in 2017. He participated in several international Programmes, coordinated by space agencies such as ESA, SNSA, DLR, aimed at allowing University students to carry out hands-on activities and to launch their in-house developed experiments in space or stratosphere. His main research activities deal with the utilization of passive tracking techniques for tracking of aircraft and spacecraft. Since the start of his PhD course, he is collaborating in the supervision of the S5Lab (Sapienza Space Systems and Space Surveillance Laboratory) student activities, promoting the participation of students of all the Faculties into space-related hands-on activities. As done for his lab at Sapienza, he firmly believes that the participation of students at all levels into practical space-related activities can represent a breakthrough point early in their academic and professional career.</p>	
Research Interests	<ul style="list-style-type: none"> <li>• CubeSats design, development and operations</li> <li>• Stratospheric experiments development</li> <li>• Passive tracking systems (based on LEDs and RF dummy transmitters)</li> <li>• Space debris tracking through optical observatories</li> </ul>	
Hobby	<ul style="list-style-type: none"> <li>• He plays tennis and soccer;</li> <li>• He used to play the piano and the keyboards in a junior orchestra and in school rock bands;</li> </ul>	


Country/Region	Japan	Portrait 
Name of Student Rep	Makiko Kishimoto	
University/College	Kyushu Institute of Technology	
Email Address	p111016m@mail.kyutech.jp	
Brief Biography	<p>I graduated from Kyushu Institute of Technology in Japan with Bachelor's degree in Integrated System Engineering in March 2019. I was involved in developing three satellites of BIRDS-3 project during my Bachelor's degree. BIRDS-3 project is the third project of the Joint Global Multi-Nation Birds Satellite project abbreviated as "BIRDS project." It is a cross-border interdisciplinary satellite project for non-space faring countries supported by Japan. In BIRDS-3 project, I designed BIRDS-3 satellites' dipole antenna and improved the communication between satellite and the ground station (GS) with other project members. Therefore, I wrote about "Improvement of Communication System for 1U CubeSat and Automation/ Standardization of GS Operation System" as the theme for graduation thesis. In April 2019, I entered the Master's course in Electric Space System Engineering in the same university and am continuing my research on Automation/ Standardization of GS Operation System. During this summer for about 2 months, I studied at Cal Poly, San Luis Obispo in the US as an exchange student. My research topic was about SDR (Software Define Radio) to improve the GS system and the satellite communication. By staying in the US, I found many good points of Japan and then I started to like Japan more than what I did before studying in the US. Therefore, I thought I would like to contribute to Japanese space activity as a Japanese from now. As Japanese student representative, I will become a bridge between Japanese universities and universities in other countries. I will start a new satellite development project from this September, so I would like to share BIRDS-3 project and new project experiences with UNISEC-Global members, and also share the experience at UNISEC-Global with the members of my university.</p>	
Research Interests	<ul style="list-style-type: none"> <li>• Satellite design</li> <li>• Satellite communication</li> <li>• Ground station system</li> </ul>	
Hobby	<ul style="list-style-type: none"> <li>• Swimming</li> <li>• Running</li> <li>• Singing</li> <li>• Looking at the stars</li> <li>• Hiking</li> </ul>	


Country/Region	Japan	Portrait
Name of Student Rep	Hiroto Seki	
University/College	The University of Tokyo	
Email Address	seki@space.t.u-tokyo.ac.jp	
Brief Biography	<p>Mr.Seki has been in the master course of aeronautics and astronautics in the University of Tokyo since 2019.</p> <p>He is a member of structure team of EQUULEUS project, a project of JAXA and the University of Tokyo. EQUULEUS is 6U CubeSat and will go to the EML2 to do several science and engineering missions.</p> <p>Also, He was doing research on active debris removal by laser radiation pressure for graduation thesis, and now, he is doing research on pointing control for laser communication.</p> <p>He wants to promote Japanese Space activity by world-leading small spacecraft missions by not only professionals but also students.</p>	
Research Interests	<ul style="list-style-type: none"> <li>• Active Debris Removal</li> <li>• Structure design of satellite</li> <li>• Laser communication</li> <li>• Pointing control</li> </ul>	
Hobby	<ul style="list-style-type: none"> <li>• tennis</li> <li>• reading</li> </ul>	




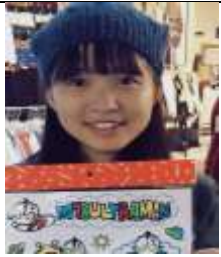
Country/Region	Malaysia	
Name of Student Rep	Farah Hanum Mohd Fadzil	
University/College	University of Science Malaysia	
Email Address	<a href="mailto:hanumfadzil@gmail.com">hanumfadzil@gmail.com</a>	
Brief Biography	<p>Farah Hanum is a student who is currently pursuing her Bachelor's Degree in Aerospace Engineering in the University of Science Malaysia. She is currently studying both aeronautical and aerospace engineering but majoring in the space systems and integration. She is currently working on her research on the design and fabrication of magnetic torquer for application in Malaysian Youth Satellite (MYSat) : A 1U CubeSat for Electron Density Measurement. On 2016, she started to involve actively when her team worked on the space education outreach through the aid of High Altitude Balloon. The outreach was aimed to focus on the students from the rural areas around the university. The mission continued on the year 2017, and this time around, the students were given a chance to fly their experiment together with the High Altitude Balloon as their mission. These outreach has won as the Best Educational initiative in both 2016 and 2017. In the same year she participated the Asia Pacific Space Generation Workshop as a kick-off to her space movement in the space education. She has also attended as a delegate in the 25th Asia Pacific Regional Space Agency Forum and presented her space education movement in Malaysia known as Space Connect which has impacted almost 2000 students in just two years.</p>	
Research Interests	<p>Research interests are mainly on the spacecraft design, system integration and simplification of High Altitude Balloon system for its utilization on school grounds.</p>	
Hobby	<p>When I have a free time, I enjoy watching sci-fi movies and Marvel series. When I have more free time, I would spend my time to go for nature walks or thrill activities such as water rafting, hikings and wall climbing.</p>	

Country/Region	Philippines	
Name of Student Rep	Bryan R. Custodio	
University/College	University of the Philippines Diliman	
Email Address	bryan.custodio@eee.upd.edu.ph	
Brief Biography	<p>I am a graduate of Electronics Engineering from the Far Eastern University Institute of Technology in the Philippines. Currently, I am taking my Master's degree in Electrical Engineering, under the Nanosatellite Engineering track, at the University of the Philippines Diliman. I am also the Project Manager of the local team based at UP Diliman, developing the first Philippine made cube satellite to be launched in 2020. Aside from doing the usual responsibilities of the Project Manager, which is to lead, motivate, and coordinate with the activities of the team, my technical role is to lead on the Assembly, Integration, and Testing of the cube satellite models. It is also my responsibility to design the Antenna system as well as the communication system for the satellite space segment. Having been assigned to the RF and communication systems component of the cube satellite project, I have become fascinated with Radio Astronomy and Satellite Communications hence, my research is concerned with developing antennas for small satellites, specifically, on developing antennas that can be integrated with other satellite subsystems to resolve the stowage space and mass constraints of small satellites. With our local team, our goal is to successfully develop and launch the cube satellite University project. I think this is a good turning point to make a statement that Philippines is now ready to enter the field of space technology and satellite development. Excited on the establishment of the Philippine Space Agency and being part of the pioneer team that will locally develop a cube satellite, It is my plan to extend the knowledge and aspiration to the Filipinos. Putting things into action, our first step is to proliferate the knowledge on space technology by working with different local Universities and provide training, lectures, and workshops on the benefits of space research, satellite development and space related activities. Being at its very foundation, our focus for now is on the Mission Engineering and applications aspect of space activities like Earth observation, store and forward communications, and automatic packet reporting system. I aspire that at some time, this will further expand to spacecraft development research and advanced aerospace and astronautics.</p>	
Research Interests	<p>My research interests include the following:</p> <ol style="list-style-type: none"> <li>1. Wireless Communications</li> <li>2. Antenna Engineering</li> <li>3. RF and Microwave Engineering</li> <li>4. Communications and Embedded systems for Small Satellites</li> </ol>	
Hobby	<p>When I'm not working, I enjoy doing the following activities:</p> <ol style="list-style-type: none"> <li>1. Spending time with my Family</li> <li>2. Playing Sports</li> <li>3. Travelling</li> </ol>	

Country/Region	Switzerland	<p style="text-align: center;">Portrait</p> 
Name of Student Rep	Alfonso Villegas	
University/College	EPFL	
Email Address	Alfonso.villegas@epfl.ch	
Brief Biography	<p>Alfonso Villegas has a bachelor's degree in Mechanical Engineering at EPFL (Swiss Federal Institute of Technology Lausanne). He completed his last year of Bachelor abroad at Universidad Pontificia Comillas in Madrid where he took his first courses in Space Technologies. Alfonso is now a master's student at EPFL, with a major in Energy and a minor in Management; and in 2018, he created together with two colleagues the swiss space mission CHESS (Constellation of High Energy Swiss Satellites). The mission consists of launching a constellation of CubeSats loaded with a hard X-ray Compton polarimeter that will fly around Earth on a low sun synchronous orbit. The constellation will operate during three years with a triple science objective:</p> <ul style="list-style-type: none"> <li>– Permanent monitoring of the full sky for hard X-ray transient gamma ray bursts.</li> <li>– Permanent observation of the sun in hard X-rays energies</li> <li>– Observation of space weather events, electrons protons and heavy ions.</li> </ul> <p>CHESS has the ambition to develop the space community in Switzerland and drive the creation of future students' space projects.</p>	
Research Interests	<ul style="list-style-type: none"> <li>• System Engineering</li> <li>• Spacecraft design</li> <li>• Project management</li> </ul>	
Hobby	<ul style="list-style-type: none"> <li>• Tennis</li> <li>• Rugby</li> <li>• Chess</li> </ul>	

Country/Region	Switzerland	
Name of Student Rep	Nicolas Martinod	
University/College	EPFL - Swiss Federal Institute of Technologies of Lausanne	
Email Address	nicolas.martinod@epfl.ch	
Brief Biography	<p>Nicolas Martinod is a robotic master student from EPFL with a minor in space technologies. He received a B.S. degree in mechanical engineering in 2018 from the same school. He is now working as project manager of CHESS - Constellation of High Energy Swiss Satellites. CHESS is a swiss student CubeSat mission from the EPFL Space Center. It aims at launching a constellation of 4x 3U CubeSat to study high energy astrophysics by 2022. The constellation will operate during three years with a triple science objective:</p> <ul style="list-style-type: none"> <li>– Permanent monitoring of the full sky for hard X-ray transient gamma ray bursts.</li> <li>– Permanent observation of the sun in hard X-rays energies</li> <li>– Observation of space weather events, electrons protons and heavy ions.</li> </ul> <p>CHESS has the ambition to develop the space community in Switzerland and drive the creation of future students' space projects.</p>	
Research Interests	<ul style="list-style-type: none"> <li>• Satellite Design</li> <li>• System engineering</li> <li>• Project management</li> <li>• Astrophysics</li> <li>• Space weather</li> </ul>	
Hobby	<ul style="list-style-type: none"> <li>• Ski</li> <li>• Gymnastics</li> <li>• Solo traveling</li> </ul>	

Country/Region	Switzerland	
Name of Student Rep	Tristan Trebaol	
University/College	EPFL - Swiss Federal Institute of Technologies of Lausanne	
Email Address	tristan.trebaol@epfl.ch	
Brief Biography	<p>Tristan Trebaol is a computer science and engineering master student from EPFL with a minor in space technologies. He received a B.S. degree in mechanical engineering in 2018 from EPFL. He is now working as management system engineer of CHESS - Constellation of High Energy Swiss Satellites. CHESS is a swiss student CubeSat mission from the EPFL Space Center. It aims at launching a constellation of 4x 3U CubeSat to study high energy astrophysics by 2022.</p> <p>The constellation will operate during three years with a triple science objective:</p> <ul style="list-style-type: none"> <li>– Permanent monitoring of the full sky for hard X-ray transient gamma ray bursts.</li> <li>– Permanent observation of the sun in hard X-rays energies</li> <li>– Observation of space weather events, electrons protons and heavy ions.</li> </ul> <p>CHESS has the ambition to develop the space community in Switzerland and drive the creation of future students' space projects.</p>	
Research Interests	<ul style="list-style-type: none"> <li>• Satellite Design</li> <li>• System engineering</li> <li>• Project management</li> <li>• Astrophysics</li> <li>• Space weather</li> </ul>	
Hobby	<ul style="list-style-type: none"> <li>• Competitive sailing</li> <li>• Iron man racer</li> <li>• Japanese culture</li> </ul>	

Country/Region	Taiwan	
Name of Student Rep	Yun-Rong Yang	
University/College	National Cheng Kung University	
Email Address	jobo860723@gmail.com	
Brief Biography	<p>My name is Yun-Rong Yang, currently studying master degree at SPACE lab, Department of Electrical Engineering, National Cheng Kung University. My advisor is Prof. Jyh-Ching Juang. I work on onboard data handling subsystem including OBC hardware and flight software of IRIS CubeSat project, which serves as a core of management in the satellite. In terms of promoting space activity in my Country/Region, what I want to do is to cooperate with some enterprise to verify the reliability of the COTS in space. In addition, student projects can establish their own website or a Facebook fan page to promote their project and maybe fundraise for the project as well. Also, government institutes can hold events in universities to introduce their recent project and recruit new blood.</p>	
Research Interests	<ul style="list-style-type: none"> <li>• Onboard Data Handling</li> <li>• Flight Software</li> </ul>	
Hobby	<p>Music Guitar</p>	