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### **Student Chapter Annual Report Cover Page**

Submission De	eadline: September 30th		Submit to: stu	dentprograms@segweb.org	
Month/Year Rep	ported:From JANUARY 2022	(mm/yyyy	) – To NOVEMBER 2	2022 (mm/yyyy)	
STUDENT CHA	PTER:			Check if update needed at segweb.org	
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# ALTIPLANO NATIONAL UNIVERSITY – PUNO FACULTY OF GEOLOGICAL AND METALLURGICAL ENGINEERING PROFESSIONAL SCHOOL OF GEOLOGICAL ENGINEERING



# ANNUAL REPORT SEG UNA-Puno 2022











### **STUDENT CHAPTER EXECUTIVE COMMITTEE 2021**

	STUDENT CHAPTER EXECUTIVE COMMITTE 2022				
N°	NAMES AND SURNAMES	POSITION			
1	JHEYSON EDDER RAMÍREZ AGUIRRE	PRESIDENTE			
2	LUPACA HUANACUNI ALEX DAVID	VICE PRESIDENT			
3	JACKELINE KELLY ALARCON MAMANI	TREASURER			
4	LESLY TATIANA ARONI SURCO	SECRETARY			
5	JOHN FRANZ CALDERON PAXI	VOCAL			
6	EVELIN YOISSY ESPINOZA MAMANI	VOCAL			

### LIST OF SEG STUDENT CHAPTER UNA-PUNO MEMBERS 2022

N°	NOMBRE	APELLIDOS
1	Gustavo Salomón	Sinca Condori
2	Yuliet Pamela	Pinto Luqe
3	Jurguen Giancarlo	Miranda Idme
4	Edu	Illanes Soncco
5	Miguel Angel	Flores Choque
6	Roy Aquiles	Vilca Rojas
7	Yerson Joel	Tacca Zamata
8	Roberto	Mamani Mayta
9	Larry	Mamani Linares
10	Maricela Natividad	Pacompia Mamani
11	Edwar	Alejo Calisaya
12	Jhon Clinton	León Mamani
13	Victor	Huaracha Ccarcosto
14	Cristian Alvaro	Coaquira Apaza
15	Analy Mariana	Aguilar Meneses







# STUDENT CHAPTER ACADEMIC SPONSOR 2022

Ing. Roberto F. Zegarra Ponce

robertozegarrap@yahoo.es

Cell: +51 950747602

### STUDENT CHAPTER INDUSTRY SPONSOR 2022

Ing. Johnny Vargas Miranda

johnny.vargas@newmont.com

Cell: +51 997661545







### ORGANIZATION OF ACTIVITIES.

Throughout the year, different activities were organized by the SEG Student Chapter UNA, Puno. They are going to be presented by dates.

The activities were developed with the objective of increase the geology knowledge and skills of the members of SEG Student Chapter and geology community.

### Covid-19.

Due to the global situation, there has been a frequent monitoring of participants and exhibitors, maintaining the biosafety and keep the protocols to avoid any infection in the case of Peru.

All this to keep the activities with safety, security and the integrity of members the SEG Student Chapter UNA, Puno.







# 1. OPENING 2022 AND PRESENTATION OF THE CHAPTER EXECUTIVE COMMITTEE.

The opening of the chapter's for the year 2022 was announced the participation of the Engineer Raul Montesinos and the MSc. Engineer Jhonny Vargas, who made a presentation, for students, graduates and members of the Chapter: the main topic: "The Role of the Geologist in Exploration".

Theme: OPENING 2022 AND PRESENTATION

• Date: January 29th 2022

• Virtual platform: Google Meet

• Participants: 48

#### **Special Speakers:**

#### Johnny B. Vargas Miranda.

Geologist from Puno, he studied at the Universidad Nacional del Antiplano in Puno and has a Master's degree in Geology from the Universidad Nacional Mayor de San Marcos in Lima, Peru and Specialization Courses with Phoebe Hauff of Spectrall International Inc. AUSPECC and CSIRO (USA and Australia).

He is a specialist in spectral geology. Determination of mineralogy and interpretation of hydrothermal systems using portable and stationary equipment such as Pima-ASD, specTERRA. TerraSpec, Halo TS, TerraCORE, CoreScan with 25 years of experience working in exploration of high sulfidation, intermediate and low sulfidation mineral deposits, Porphyry Copper-Gold, Cordilleran Deposits, Au Skarns, Sediment-Hosted and Orogenic Systems.

He is currently an industry sponsor, and collaborates directly with the SEG Student Chapter UNAP.

#### Raul Montesinos.

Geologist with 6 years of experience in mineral exploration in different metallogenic belts of the central Andes, especially epithermal, porphyry, skarn and orogenic deposits, leading exploration programs from generative stage to drilling. He was also part of the founding team of the SEG Student Chapter UNAP to which he continues to give support especially to the research teams sponsored by the Society of Economic Geologists.

He currently collaborates directly with the SEG Student Chapter UNAP.







N°1



### NATIONAL UNIVERSITY OF THE ALTIPLANO SEG STUDENT CHAPTER UNA - PUNO



### **OPENING 2022!**

SEG Student Chapter UNAP invites you to participate in the presentation of the new executive committee 2022



### PROGRAM:

- -Presentation of the new executive commitee 2022.
- -Farewell to the executive commitee 2021
- Special presentations.







Participate and win scolarships.



SEG. Student Chapter UNA-Puno



SEG. Student Chapter UNAP



SEG. Student.Chapter UNAP







# 2. ARCGIS APPLIED TO EXPLORATION COURSE BASIC TO INTERMEDIATE LEVEL BY IVÁN BENAVIDES.

In this short course was learned how to create geology maps, geochemical maps, geology profiles, geomorphology, legends, and interpretation of data. This course was an initiative of the students of the chapter, and the skills focused on economic geology.

Date: January 24 to 29 2022Virtual platform: zoom

• Participants: 48









Applied to scanning (Basic level to intermediate)



**PLATAFORM** 

SCHEDULE from 3.00 until 5.00 om.



om

### **INSTRUCTOR:**



Bach: IVÁN BENAVIDES.

Bachelor in geology from the Universidad Nacional del Altiplano with experience in GIS, with knowledge in different softwares (Minesight, Target for ArcGIS, AutoCAD, Slide, Dips, Leapfrog) in different types of work as in INGEMMET area of geological risks, in explorations and mining plan, as well as the interpretation of geological sections and geological modeling of short and long term.



Seg StudentChapter Una-Puno



SEG STUDENT CHAPTER UNA PUNO



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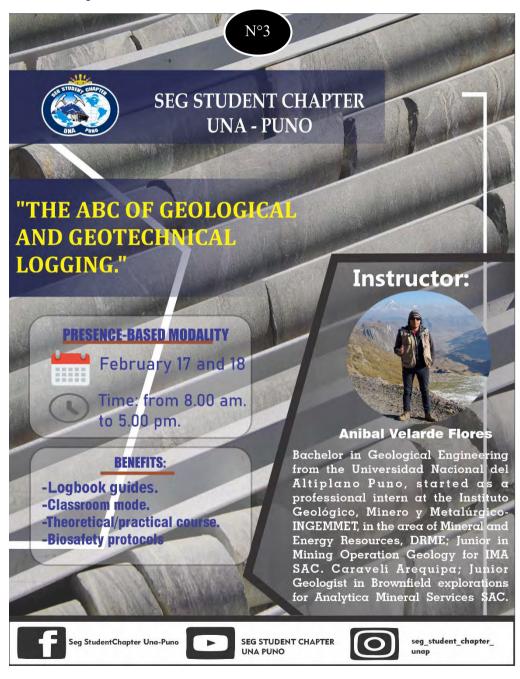




### 3. SHORT COURSE ABOUT "THE ABC OF GEOLOGICAL AND GEOTECHNICAL LOGGING".

The geological and geotechnical logging course was practical and interesting. In this course, we learned in depth about how the visual observation for rock type, alteration, texture, structure and other characteristics of the samples. Two days of the course conducted by Bachelor Anibal Velarde.

- Date: February 17 and 18, 2022
- Presence-based modality.
- Participants: 14









# 4. VIRTUAL TALK "Alteration-forming minerals" and "Mineralization in skarn deposits".

This virtual talk was held in February by Engineer Sebastian Mollapaza. This presentation dealt with the main concepts associated with Skarn deposits. Here we talked about the main minerals that are formed in this type of deposits, also explained about its importance in economic geology. This talk was done by zoom transmission and lasted approximately one hour.

- Theme: "Alteration-forming minerals" and "Mineralization in skarn deposits".
- Date: February 26th 2022.
- Virtual platform: Zoom.
- Participants: 86









# 5. ARCGIS APPLIED TO EXPLORATION COURSE BASIC TO INTERMEDIATE LEVEL BY IVÁN BENAVIDES.

The ARCGIS short course, was conducted by Bachelor Rolander Quispe. Creation of this course was aimed at students interested in learning software skills focused on economic geology.

Date: March 1 to 8, 2022.Virtual platform: Zoom.

• Participants: 15









### 6. VIRTUAL TALK "Rock-forming minerals in copper porphyries".

This virtual talk was given by Ing. Sebastián Mollapaza for the entire Peruvian geological community interested in economic geology, especially for members of the SEG student chapter.

• Theme: "Rock-forming minerals in copper porphyries".

Date: March 19th 2022.

• Virtual platform: Zoom.

• Participants: 110

N°6









### 7. COURSE WORKSHOP "Mineralogy and Petrology".

The short course was developed to members. This practical course was developed to enrich the knowledge in mineralogy and petrology, for a better understanding of the deposits, which are very important for economic geology.

- Theme: " Mineralogy and Petrology ".
- Direction of: Adonai Pacompia; Jhoan Humpiri Chavez.
- Date: May 14, 2022.
- Presence-based modality
- Participants: 18











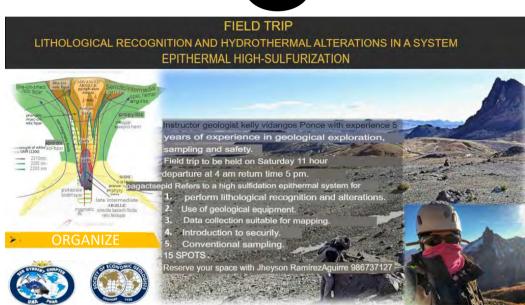
# 8. FIELD TRIP: "Sampling and Recognition of alteration minerals – metallization" Face to face at Gavilan de Plata led By Bachelor Kelly Vidangos.

Direction of: Kelly Vidangos Ponce.PLACE: LARAQUERI, Puno-Perú.

• Date: APRIL 16

• Participants: 14 participants.













### 9. INFORMATIVE TALK "A look at high-sulfidation epithermals."

The presentation was held on June 7, 2022 at the Faculty of Geological Engineering where the engineer Raul Montesinos explained about high sulfidation epithermal to the students from STUDENT CHAPTER SEG-UNA- PUNO.









### 10. "Recognition and description of mineral deposit samples".

This was on June 7, 2022 at the School of Geological Engineering by engineer Raul Montesinos, hand samples from different deposits types were exposed, and was time to recognize minerals and discussion of each sample by physical properties.

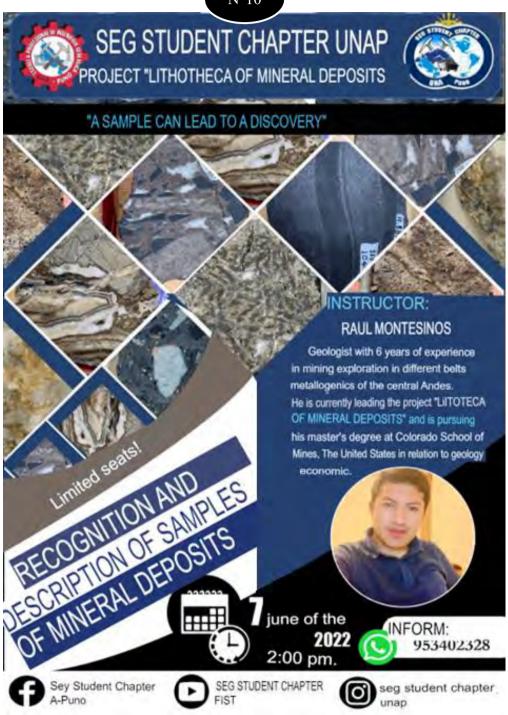
• Direction of: Raul Montesinos Apaza.

• Place: mineralogy cabinet

• Date: June 7, 2022

• Participants: 18.

N°10









# 11. FIELD TRIP: "Lithological reconnaissance and hydrothermal alterations in a high-sulfidation epithermal system."

The purpose of this field trip was to recognize the hydrothermal alterations at the Rosales mine, a high sulfidation epithermal deposit. On June 11<sup>th</sup>. We have received the support of Bachelor Kelly Vidangos, member of the SEG STUDENT CHAPTER UNA- PUNO.

• Direction of: Kelly Vidangos Ponce.

• PLACE: LARAQUERI, Puno-Perú

Date: June 11, 2022Participants: 18.







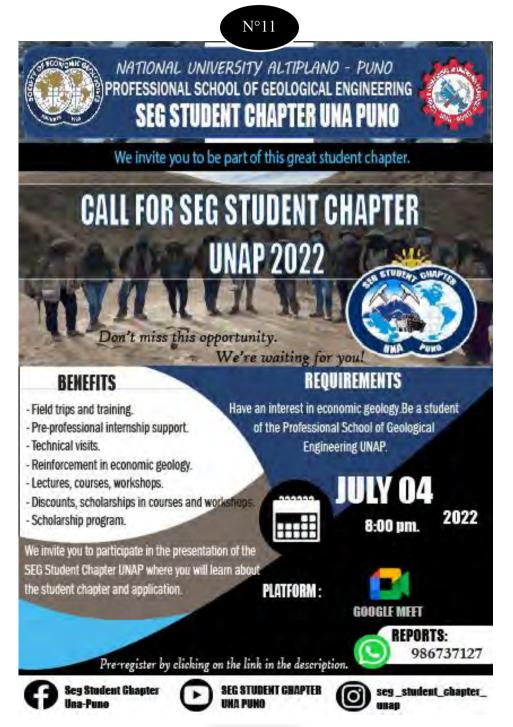




# 12. "Informative talk on SEG STUDENT CHAPTER UNA-PUNO" and "Call for new members SEG-UNA PUNO"

The talk took place on July 4, 2022 in a virtual way, by Jhoan Humpiri, former president of the SEG STUDENT CHAPTER –UNAP 2021, with the purpose of informing about the benefits of the SEG and also to teach how to use the SEG platform to the members of the SEG student chapter UNA-Puno.

The convocation process was carried out on July 4, 2022 where a knowledge test, a mineralogy test and a personal interview were taken, the process lasted a week and as a result there were fifteen new members.









### 13. FIELD TRIP: "Logging and sampling of blastholes"

This field trip was carried out in person by Bachelor Saúl Galindo Salas with the objective of introduction to the sampling and registration of boreholes in the field.

Date: June 7, 2022Participants: 16.







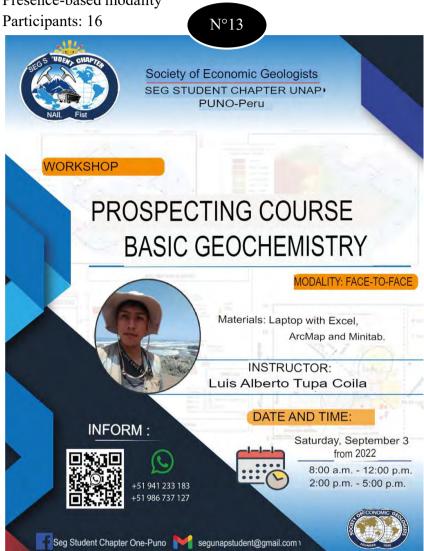




### 14. "Basic geochemical prospecting course"

It was held on September 3, 2022 directed by Bachelor Luis Alberto Tupa Coila with the purpose of introducing the basic geochemical prospecting from the use of ArcGIS software.

Date: October 3, 2022.Presence-based modality











# 15. GEOLOGICAL MAPPING: DIGITIZING MAPS AND SECTIONS WITH ARCMAP AND ADOBE ILLUSTRATOR.

The talk was developed to support recently graduated members to apply for preprofessional internships.

- Theme: "Geological mapping: digitizing maps and sections with arcmap and adobe illustrator".
- Date: Sunday, September 4 and 11, 2022
- Modality: on-site and virtual.
- Participants: 8









### 16. "GEOLOGICAL MAPPING AND CORRECT USE OF THE COMPASS".

The main goal was to make sure the use of the compass in geological mapping with sedimentary rocks (strike and dip), of the Vilquechico and Ayabacas formation, (Upper Cretaceous), as well as the correct use of the compass in the field. Bachelor Adonai Pacompia.

Title: Adonai Pacompia.Date: September 17, 2022

• Participants: 9.









# 17. LECTURE SERIES IN COMMEMORATION OF THE WOODEN WEDDING ANNIVERSARY OF THE SEG SETUDENT CHAPTER UNAP.

The lecture series in commemoration of SEG Student Chapter's anniversary was held with three internationally well-known engineers with experience in economic geology.

### 17.1. MAGMATIC-HYDROTHERMAL SYSTEMS. ORIGIN, EVOLUTION AND GUIDELINES FOR EXPLORATION BASED ON MINERAL COMPOSITIONS.

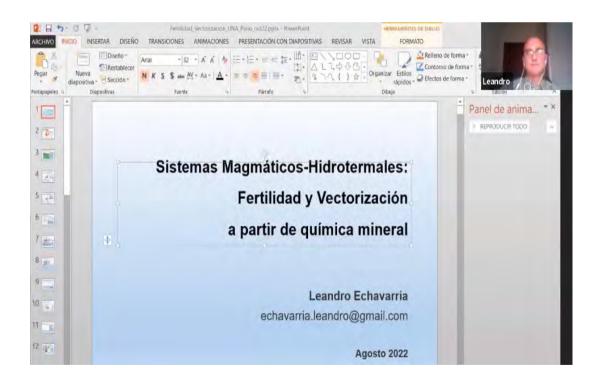
### The speaker: Dr. Leandro Echevarria,

The first conference in commemoration of the anniversary, was led by Engineer Leandro E. Echavarria, with the theme "Magmatic-hydrothermal systems, origin, evolution and guidelines for exploration based on mineral composition", which allowed us to increase our understanding in relation to fertilizing magmas and mineralization from chemical of minerals, knowing the evolution of the petrology, and the subduction model.

• Date: October 6th at 10.00 am 2022

• Virtual platform: Zoom.

• Participants: 42









### 17.2. DEFINING EXPLORATION TARGETS WITH MULTIPLE DATA SOURCES. CASE STUDY

### The speaker: Manuel Aragon Arreola.

The second conference in commemoration of the anniversary, was led by Engineer Manuel de J. Aragon - Arreola, with the theme "Defining exploration targets with multiple data sources case study", a discussion was held about exploration targets, what we need and how we define a way to explore a deposit, considering the geological, physical and geochemical data, and the definition of the targest.

• Date: October 6th at 11.00 am 2022

• Virtual platform: Zoom.

• Participants: 47







# DEFINIENDO BLANCOS DE EXPLORACIÓN CON DATOS DE MÚLTIPLES FUENTES CASO DE ESTUDIO

¿Qué datos entregan más valor? ¿Cuál es la relación costo/beneficio de cada tipo de datos?

Aniversario del SEG Student Chapter Universidad Nacional del Altiplano, Puno, Perú Octubre 6, 2022

Manuel Aragón Arreola Gerente de proyectos de exploración E-mail: manuel.aragon@agnicoeagle.com









### 17.3. MINERAL DEPOSITS RELATED TO INTRUSIONS PETROGENESIS AND TECTONICS

### The speaker: Dr. Benito Noguez Alcantara.

The third conference in commemoration of the anniversary, was led by Engineer Benito Noguez Alcantara, with the theme "Mineral deposits related to intrusions - petrogenesis and tectonics", which aims to differentiate the models of deposits that are related to intrusions; tectonics trans lithospheric structures, magmatism, metallogenesis, magmatism and characteristics of the different types of deposits.

Date: October 28th 2022.Virtual platform: Zoom.

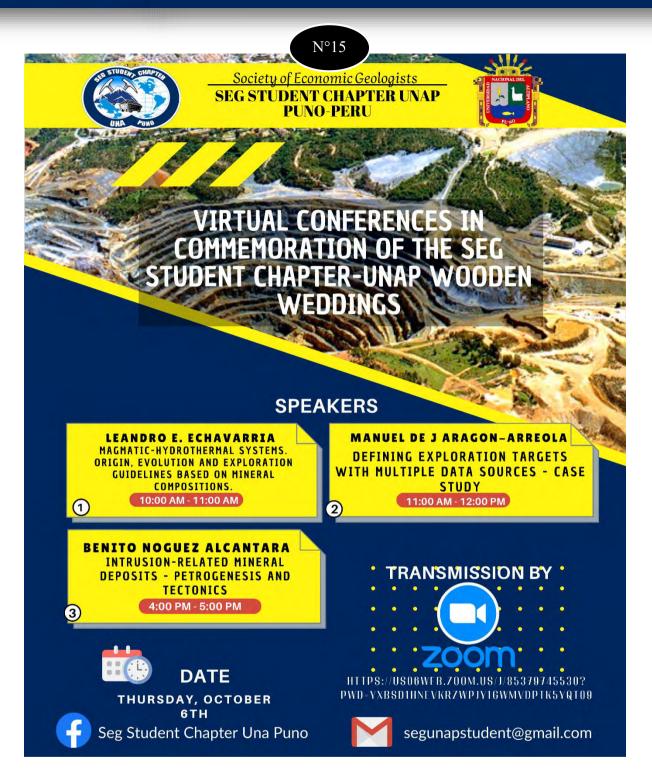
• Participants: 52













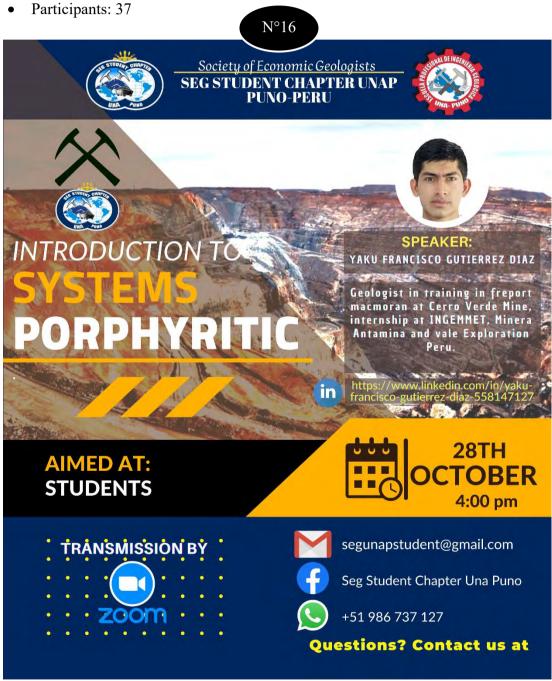




### 18. VIRTUAL TALK BY YAKU FRANCISCO GUTIERREZ DIAZ.

The virtual talk was given by YAKU FRANCISCO GUTIERREZ DIAZ about "Porphyritic systems" aimed at students interested in economic geology.

- Theme: "Porphyritic systems".
- Date: October 28th 2022.
- Virtual platform: Zoom.





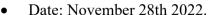


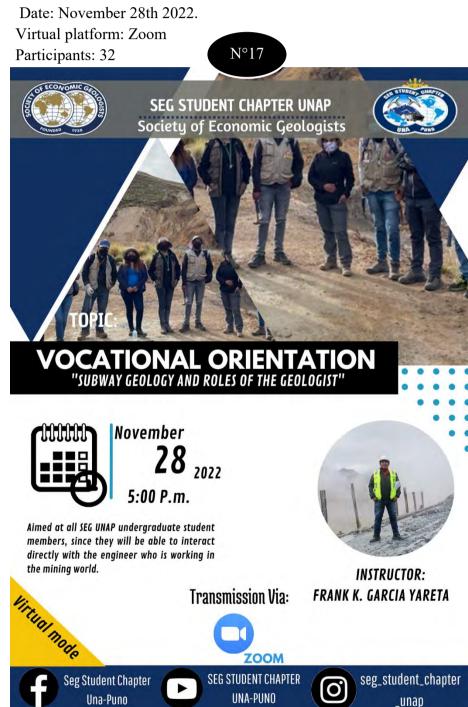


### 19. VIRTUAL TALK BY FRANK K. GARCIA YARETA.

The discussion about the application for pre-professional internships, helped several of the students and members of SEG STUDENT CHAPTER UNAP to participate and have the opportunity and the experience, with the advice, suggestions and guidelines from engineer Frank Garcia, who allowed us to take the exam for the BUENAVENTURA company; and possibility to be involved in the next process. The undergraduate student needs to be prepared for the future, at the end our studies at the university.

Theme: "VOCATIONAL ORIENTATION CONVERSATION".











### 20. VIRTUAL TALK ABOUT START OF PROFESSIONAL CAREER.

The talk was developed to help newly graduated members start their professional careers, and take advantage of their skills for job interviews.

### The speakers:

- JULIO E. PEREZ FLORES
- **SAUL ARIAS**
- FREDDY MALDONADO
- ISABELLE ASTO
- Theme: "START OF PROFESSIONAL CAREER".
- Date: November 29th 2022.



