

# TAYLOR VASQUEZ

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Colorado Springs, Colorado

## EDUCATION

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<b>BI</b>	Bachelor of Innovation Degree	May 2023
	University of Colorado Colorado Springs, Computer Science	
	Emphasis in Globalization	
	Minor in Mathematics	

## PERSONAL STATEMENT

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Throughout my life, I have grown up with a key role model that has helped shaped my idea of a leader, a hard worker, and someone who is to be respected. The role model I grew up with is my mom. My mom has made a huge impact on my thinking skills, my leadership skills, and my life skills. Without my mom's help guiding me through life, I know I would be a different person today.

At a young age, I knew that my role model would be my mom. I always envied how hard she worked, the time she spent with her family on the weekends, planning amazing vacations, and supporting her children in the routes they were looking to take. I remember my mom supporting me in wanting to quit sports and find a different hobby I enjoy when I was in elementary school. Once middle school came along my parents, especially my mom, encouraged me to take up an instrument and join the band. My mom had told me the stories she had back when she was in the band and how the memories she had made, she would never trade for anything.

Once hearing about how many memories she had made, I wanted to go through the same thing. I wanted memories that I would always remember and would never trade the experience for anything. My parents supported me in choosing the wind section of the band, even though both my parents were brass players. My mom set up private lessons and took me to find many music books to practice and have fun with. Those years of practicing an instrument were my mom subtly guiding me toward a work ethic that would keep me focused and engaged. Without this work ethic, I do not believe I would feel as accomplished as I do today.

My work ethic not only helped me in the band but helped guide me in school. Teachings had shown me that the earlier I started my work, the more effort I put into learning the material and studying for exams and that the payoff would be rewarding. I always wondered what that rewarding feeling would feel like, I never experienced that feeling in high school. But the moment I found my path in college and started to take classes that would help achieve my future. I discovered that feeling and I now strive to keep feeling that with any work that I accomplish.

I will admit that this work ethic, even though it was always in front of me, took me a while to grasp and understand. As I mentioned, it was not until I found the path, I wanted my future to be on that I started to understand the meaning behind a good work ethic. How it led to a rewarding feeling. Once I realized that Computer Science would be what I wanted for

the future, I wanted to keep encouraging myself to get to that reward. The best encouragement came from that feeling when a program runs successfully. It was that rewarding feeling that I was missing in my work ethic, and I finally found it along with my future.

As I continued through my degree, I was encouraged to take the Innovation courses. I explained the course's intentions and what people would gain from taking the course to my mom. She expressed her enthusiasm about the course and how it will help me grow out of my inner shell and learn to become a valuable leader in the future. She started to tell me about her work experience and how she worked her way to a position as a "leader" and how she learned from her past managers, professors, and co-workers. My mom made it clear that she wished she had more experience in leading and working with a client before entering the workforce.

After understanding that the Innovation courses would not only be beneficial for my future but help me better understand a team format. I pushed myself to go for the Bachelor of Innovation in Computer Science. Throughout my years at the University of Colorado, Colorado Springs, the Innovation courses have helped me progressively see the importance of team members and an effective team leader. I learned the role of a leader not only from the team leads, but the amazing professors who teach the course. With the professors, team leads, and my mom as key people to look up to, I felt that I was more than prepared to lead my team.

In the Fall semester of 2022, I led a team for a client, Jeremy Janus. Through this team, I wanted to not only give Jeremy useful and quality work, but I wanted to help prepare my team for leading their team. After all lecture periods, I helped clarify any misunderstandings and emphasized the key phrases the professors had told all teams to use. By the end of the semester, I had provided Jeremy with quality work and felt that I have given my team the means to be great leaders for their team.

Throughout the Fall semester of 2022, I always went to my mom for advice and help with leading my team. I told her about every member and their work ethic, what had been worked on, and what was not. She gave me her two cents and said, "the best thing you can do for your team, does not only show that you are human, that needs help from time to time, who isn't afraid to ask for help, but also be a leader who is stern about what work needs to get done." I followed her advice and found that this method tended to work for most of the team members and their quality of work increased through the semester.

I felt proud knowing that my work and leadership were not only acknowledged by my team but by the professors, the other Jeremy Janus team, and Jeremy himself. By the end of the semester that proud, amazing feeling that I was experiencing never felt so worth it. My work ethic and my role model had helped me succeed in a course that I had felt a great deal of anxiety towards. As the semester progressed, my anxiety had gone down because I kept telling myself that I prepared to lead. I had plenty of experience, or stories of experiences from my mom, to help me carve a path for my team.

My mom is my biggest role model and will continue to be my role model in the future. Her knowledge and experience have taught me valuable lessons that I apply to my daily life and my future. These lessons have helped me create a good work ethic, what it takes to be a good leader, and how being a good leader helps show the respect that you have earned. I would not change who my role model is, because I have learned so much from my mom, that I could not imagine what my life would be like without her as my role model.

### **Innovation Courses**

#### **ENTP 4500 Entrepreneurship and Strategy**

- Course objectives are to integrate innovation and entrepreneurship knowledge and skills from the innovation core into planning for future innovation efforts, identify problems and generate innovative solutions across disciplines through the application of innovation and communication skills in entrepreneurial efforts.
- Knowledge and skill components learned include, critical and creative thinking, quantitative and qualitative resources, innovation techniques, ethical principles of innovation and entrepreneurship, and methods of strategic communication and interpersonal communication.

#### **INOV 4010 Innovation Team: Design and Lead**

- Emphasis on design and leading team projects
- **Client Information**
  - Company: Jeremy Janus Photography
  - Client Name: Jeremy Janus
  - Website: <https://www.jeremyjanusphotography.com/>
  - Phone: (970) 590-9845
  - Email: [jeremyjanusphotography@gmail.com](mailto:jeremyjanusphotography@gmail.com)
- **Scope of Work:** To perform research on existing successful YouTube photography channels, supply outlines for YouTube descriptions and future videos, aid in the organization of existing files, researching cost efficient databases, and increase the aesthetic appeal of Jeremy Janus's YouTube channel to work towards his goal of monetization
- **Outcome:** Team completed reports for NAS and Hard Drive research, YouTube Description outline, Thumbnail designs, Banner designs, Intro Video Setup Guide, which was a handoff from the other Jeremy Janus group, and finally the Physical Hard Drive Organization.

#### **INOV 3010 Innovation Team: Research and Execute**

- Advanced participation in team projects including research, design, and execution
- **Client Information**
  - Company: Ownr.us
  - Client Name: Jeff Dempsey
  - Phone: (501) 658-1132
  - Email: [jdempsey@uccs.edu](mailto:jdempsey@uccs.edu)
- **Scope of Work:** The purpose of the project is to research and determine the best available options for creating the client's marketplace platform, Ownr.us. The research will include details on various e-commerce platforms, crowdfunding sites

- **Outcome:** Outcomes consisted of extensive research on e-commerce systems and global marketplaces, that was compiled into two comprehensive e-commerce and crowdfunding reports.

### **INOV 2100 Technical Writing, Proposals, and Presentations**

- Addresses five major types of technical writing: project reports, funding proposals, magazine and trade articles, technical reports, and journal articles.

### **INOV 2010 Innovation Team: Analyze and Report**

- Emphasizing team projects, research, analyzing data, and reporting
- **Client Information**
  - Company: MENDA
  - Client Name: Juliette Parker
  - LinkedIn: <https://www.linkedin.com/in/juliette-parker-57067b175/>
- **Scope of Work:** Research on homelessness in Colorado Springs, design for small home community, brochure for advertisements
- **Outcome:** Group created multiple reports on homelessness in Colorado Springs. Created a small home community design with all requirements and created a brochure with accurate information.

### **BLAW 2010 Business and Intellectual Property Law**

- Examines the legal significance of ideas, innovations, and start-up organizations. A focus on the issues of intellectual property, including patents, copyrights, and brand protection. Coverage of essential contracts and agents.

### **INOV 1010 The Innovation Process**

- Overviews the key components in the innovation process. Examines the interdisciplinary nature of innovation. Includes group exercises focused on improving team dynamics, brainstorming, conceptual-block busting and other creativity and problem-solving activities.

### **ENTP 1000 Introduction to Entrepreneurship**

- Designed to introduce the process of turning an idea into a successful startup business. Covers basic aspects of a successful business and introduces the processes for creating a potentially successful business plan. Able to assess opportunities for venture/value creation, to address/identify risk in the startup process and develop presentation skills to convince others of the potential success to implement the business entity

## **Computer Science Courses**

### **CS 4300 Advanced Software Engineering**

- Understanding new challenges, opportunities, and open problems of Software as a Service relative to shrink-wrapped software. Communicate efficiently and effectively with customers to gain a well-rounded view of needs and to present/get feedback through frequent demos. Develop testing and refactoring

skills. Develop project management and communication skills for use with a team, managers, and customers in an agile development setting.

### **CS 4720 Design and Analysis of Algorithms**

- Design methodologies: divide-and-conquer, exhaustive search, dynamic programming. Time and space complexity measures, analysis of algorithms. Survey of important algorithms for searching, sorting, graph manipulation. Tractability: class P and NP, NP complete problems.

### **CS 4500 Operating Systems I**

- Introduces concepts, terminology, and algorithms of operating systems. Describes semaphores, processes, virtual mappings, interrupts, resource allocation and management, protection, synchronization, scheduling, queuing, and communication as applied to operating system design and implementation.

### **CS 4420 Database Systems I**

- General database concepts as well as database system technology. Covers ER and R data models, R-algebra, SQL, data storage and indexing, query optimization, database design and security.

### **CS 4220 Computer Networks**

- Fundamental computer networking concepts and principles. Creates a foundation of network architectures, protocol design principles, and TCP/IP programming.

### **CS 4200 Computer Architecture**

- Fundamentals of computer design, instruction set principles and examples, pipelining, advanced pipelining and instruction-level parallelism, memory-hierarchy design and survey of design issues in storage, interconnection network and multiprocessor systems.

### **CS 3300 Software Engineering**

- Building a solid foundation for developing and maintaining sustainable codebases through modern practices. Version control, project management styles, coding best practices, cloud services, and web technologies used to create deployable products and maintain work.

### **CS 3160 Concepts of Programming Languages**

- Evolution of the central concepts of programming languages, describing syntax and semantics, data types, abstract data types, control structures, subprograms, concurrency, and exception handling.

### **CS 3060 Object-Oriented Programming Using C++**

- Principal goal is to learn the fundamentals of object-oriented programming, gain skill and proficiency in using the C++ programming language, to

exercise the C++ language implementing a moderate sized software system designed with objects.

**CS 3050 Social and Ethical Implications of Computing**

- Understanding of ethical, social, political, legal, and economic aspects of the application of computers.

**CS 2160 Computer Organization and Assembly Language Programming**

- Introduction to the concepts of computer architecture, functional logic, design, and computer arithmetic. Knowledge on the mechanics of information transfer and control within a computer system.

**CS 2080 Programming with UNIX**

- Introduction to UNIX operating system with emphasis on the development of C and command shell programs.

**CS 2060 Programing with C**

- C programming language concepts and basic knowledge.

**CS 1450 Data Structures and Algorithms**

- Concepts of data type, data abstraction, and data structure. Internal representations of fundamental data types. Linear data structures: stack, queue. Linked data structures and dynamic data types. Search table data abstraction, linear search in arrays and lists, binary search is arrays and trees. Binary trees, non-binary trees, binary search tress.

**CS 1150 Principles of Computer Science**

- Introduction to programming with emphasis on computer science concepts. Develops methods for computer problem solving. Develops proficiency for programming in a modern programming language and introduces the concepts of abstraction in problem solving.

**TECHNICAL SKILLS**

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**Programming:** Java, Linux, C, C++, Assembly, Python, HTML, SQL

**Applications:** Microsoft Suite, Jira, Visual Studio, GitHub

**RESEARCH SKILLS**

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Knowledgeable in effectively researching various topics to help in a team format.

**SKILLS**

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**Capabilities:** Willing to learn new skills and programming languages, basic knowledge of Operating Systems, ability to work in a team environment, detail oriented, flexibility, willing

to help others, creative and innovative thinking, time-management ability, great problem-solving ability, ability to make connections with others, reliable, fast learner

## **SOFTWARE ENGINEERING EXPERIENCE**

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### **L3 Harris**

May 2022 to Aug 2022

#### **Software Engineering Intern**

- Assisted in creating a TCP/UDP Client and Server, simulating a dome and telescope, to test the system
- Worked within Virtual Machines
- Provided adequate test scripts for the dome and telescope system

## **COMMUNITY INVOLVEMENT**

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### **Organization**

Black Forest Fire, Black Forest in Colorado, 2013

- In 2016 I helped with the cleanup in the Black Forest Region. Volunteered to help multiple families in Black Forest region clean their land.

### **Organization**

Little League All Star Baseball Team, Colorado Springs, 2017

- Volunteered to help my younger brothers' baseball team with team activities, team bonding sessions, created a fun batting lineup music. Helped all the team moms who volunteered.

## **RECOGNITIONS**

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### **Recognition**

#### **National Intern Day**

- During internship at L3 Harris, I was recognized for my outstanding work on the system I was assigned to and recognized for my detailed organization in performing tests for that system.

## REFERENCES

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**Elizabeth Gavino**, Co-worker  
University of Colorado Colorado Springs  
Phone: (719) 271-1157  
Email: eli.gavino03@gmail.com

**Dr. Serena “Sully” Sullivan**, Professor  
Department of Computer Science as a Computer Security Faculty Member  
University of Colorado Colorado Springs  
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