

# Patrick Maes - Software Engineer/Developer

patrickmaes1112@icloud.com ❖ (720) 818-2140 ❖ Denver, CO

## EDUCATION

---

Colorado School of Mines

GPA - 3.647

Aug 2021 - May 2024

*B.S. in Computer Science*

*Golden, CO*

- CSM President's Scholarship, 3x School of Mines dean's list, Cum Laude Honors Graduate

## WORK EXPERIENCE

---

Lunar Outpost

May 2023 – Aug 2023

*Software Engineer Intern*

*Aurora, Co*

- Created an executable full-stack application with documentation and installation instructions, written in C++ and functions on both Linux and Windows platforms
- Designed data transmission for encoding robot commands into binary, sending them to a raspberry pi, and decoding the command with the test hardware unit
- Encoded commands to JSON format and converted them to binary for data transmission
- Conducted an Agile software development environment with three other team members, sharing progress through standups and on-site collaboration.
- Used Azure to manage tasks, sprints, testing and deployment, and Github to keep a working version of the application

Colorado School of Mines

Sept 2022 - Feb 2023

*Junior Security Analyst*

*Golden, CO*

- Managed, validated risk, and handled confidential security flags made by the CSM security and authorization systems
- Developed an understanding of network protocols and application interaction through monitoring network traffic and requests
- Collaborated with senior IT professionals to resolve complex technical issues, gaining knowledge on security threats and mitigation strategies
- Automated monitoring and data pre-processing tasks using scripts, practicing skills in scripting languages like Python and Bash

## PROJECTS

---

OreMarket Application

Apr 2024

*React + MongoDB Single Page Application*

- Route based web application including two react applications for the backend and frontend
- Uses CRUD requests to update database information, implemented in express
- Routes include user create/sign-in, view available products, list products with information, and checkout.

## SKILLS & STRENGTHS

---

- **Skills:** Spanish Fluency, C/C++, Java, R Studio, MATLAB, postgres/SQL, MongoDB, HTML/CSS, Javascript, React, Node.js, Remix, Python (TensorFlow, Pandas, numPy, scikit-learn), Git/Github, Linux/Bash, RESTful API, OOP, Full-stack Development, Bioinformatics, Gamemaker/Unity, Ocaml, RISC-V