

# Emma Tulsy

Denver, CO

emma.tulsy@gmail.com | c.757-618-5073 |

Portfolio: emmatulsy.com

As a geologist transitioning into product design, I bring a robust quantitative background and a passion for user experience design and problem-solving. My experience in geology has honed my analytical skills, enabling me to approach design challenges with a unique perspective. I am eager to expand my knowledge in UX/UI design and leverage my scientific expertise to create intuitive and effective user experiences.

## Experience:

### Freelance

2023 - Present

Assisted people in my community through website design. Helping communities become stronger and find the services that people offer.

### Rock Solid Data

March 2023 – Aug 2023

Temporary Database Consultant

Perth, WA, AUS

- Conducted data entry for multiple clients ensuring everything was captured in their databases
- Cleaned and validated data for the database
- Ran independent database audits for companies using SQL to make sure their data was validated
- Assigned mining lease information spatially using QGIS to minimize time in reporting
- Created validated extracts of data for yearly reporting purposes to allow companies to quickly write their reports for the government
- Assisted in setting up new databases for onboarded clients to ensure a smooth transition
- Conducted historical data compilations for clients

### Geobase

Aug 2021 – June 2022

Database Geologist

West Perth, WA, AUS

- Cleaned and loaded data for multiple junior exploration companies allowing them to focus on more important work
- Managed assay and logging data in the database and provided QAQC reports to clients
- Assembled validated databases through the compilation of historic data using WAMEX, Access, Excel, Micromine and SSMS
- Generated logging templates for new clients so that they could save time when setting up their projects
- Updated SQL scripts and data using SSMS
- Validated all data in each database before export to client

## Skills:

### Design

UX Research • Wireframing • Prototyping  
• Information Architecture • Usability  
Testing • Data Analysis • Affinity mapping  
• Problem solving

### Software

Figma • Optimal Workshop • SQL Server  
• Python • Microsoft 365 • ArcGIS •  
QGIS • Access DB • HTML • QAQC •  
Safety • MX Deposit • Logchief •  
Acquire

### Personal

Communication • Teamwork •  
Adaptability • Good sense of humour •  
Empathetic • Focused • Passionate •  
Independent • Helpful • Strategic thinker  
• Continuous learner • Creative • Honest

## Education:

### Designlab

UX Academy 2024

### Virginia Tech

M.Sc. Geoscience      GPA: 4.0/4.0

Thesis: *The Effects of Contact  
Metamorphism by Diabase Intrusion on  
the Carbon and Sulfur Bearing Phases in  
the Siltstones of the Culpeper Basin.*

### Virginia Tech

B.Sc. Geoscience

## Gold Fields St.Ives

Project Exploration Geologist

May 2021 – Aug 2021

Yilgarn Region, WA, AUS

- Designed RC and Diamond Drill plans using ArcGIS, Leapfrog and iOGAS
- Analysed tenement potential and presented recommendations.
- Wrote tenement renewal and extension reports
- Mentored geologists on logging, modelling and drilling.
- Conducted multiple safety inspections on site including on drill rigs, vehicles, and the core yard

## ConsMin

Project Exploration Geologist

May 2020-April 2021

Pilbara Region, WA, AUS

- Designed and planned RC drilling programs for greenfields, brownfields, and infill drilling using Leapfrog
- Advised exploration geologists on the rigs
- Coordinated with multiple departments in order to plan and manage RC programs and earthworks
- Assisted in invoice management and reconciliation
- Conducted weekly and daily drill inspections as well as weekly safe task observations
- Attended weekly safety meetings
- Reviewed daily earthworks and drill plods, data entry and daily drilling QAQC
- Created maps in Mapinfo/QGIS for environmental clearing permits, earthworks and drilling

## Newcrest Mining

Contract Project Exploration Geologist

Sept 2019- April 2020

Paterson Region, WA, AUS

- Assisted in developing a geological interpretation of the deposit and contributed to future drill plans
- Conducted weekly diamond drill rig audits
- Wrote daily reports
- Diamond drill core logging
- QAQC of drill data and 6 weekly reporting
- ArcGISPro mapping of drilling areas

## Newmont

Mine Geologist at Exodus and Chukar Undergrounds

June 2017- June 2019

Carlin, NV, USA

- Performed ore control duties: underground mapping, making ore calls, and data input
  - Managed these tasks for both Chukar and Exodus in a single day as we needed to cover both mines
- Logged core for multiple projects throughout the Carlin trend including (Exodus, Chukar, and Pete Bajo)
- QAQC of drill data and monthly reporting
- Designed infill ore control drill programs for RC drilling
- Used Vulcan to create the reserve and short term gold models
- iOGAS analysis to understand deposit's intrusives
- Involved in 3D prospectivity study of Exodus deposit
- Trained all new geologists at Exodus/Chukar on ore control and core logging
- Conducted yearly safety meetings and attend safety meetings monthly
- Participated in yearly lab audits

## Certificates:

- Mental Health First Aider
- SQL for Data Science from IBM

## Volunteer Work/ Leadership:

### **Virginia Tech Dept of Geosciences Alumni**

**Board Member:** Collaborates with the department of geoscience to come up with ideas for fundraising and improving the department's success.

**PGMS Volunteer:** Worked at the door of the Perth Gem and Mineral Show as well as the set up and take down

**Virginia Tech Alumni Mentor:** Mentor students in the Virginia Tech geosciences department.