

Jun Yao Wang

Mining Engineer-in-Training

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EDUCATION

Bachelor of Applied Science in Mining Engineering, Minor in Data Science <i>University of British Columbia</i>	May 2025 Vancouver, BC, Canada
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SKILLS

Mining Engineering: Underground and Surface Mine Planning, Mine Design, Mine Operations, Rock Mechanics, Soil Mechanics, Fluid Mechanics, Tailings, Groundwater Hydrology, Mineral Processing

Data Science: Machine Learning, Discrete Optimization Modelling, Relational Databases, Statistical Inference

Programming: Python (scikit-learn, pandas), SQL, R, C++, MATLAB, GitHub, VBA

Certifications: Engineer-in-Training (EGBC)

WORK EXPERIENCE

Mining Engineer <i>United States Steel Corporation</i>	Jan 2026 – Present Hibbing, MN, United States
<ul style="list-style-type: none">Planned the sequencing of shovel movements by collaborating with engineers, operators and geologists to achieve a consistent ore blend and production rate of iron ore pelletsDesigned roads and ramps on Minesight3D to optimize material haulage for the mine forecastManaged the placement and routing of waste material towards dumps or construction projects in-pitConducted daily field tours to monitor plan compliance	
Underground Mining Engineer Co-op <i>Ascot Resources Ltd.</i>	Jan 2024 – Aug 2024 Stewart, BC, Canada

- Drafted the design of development drifts, underground rehabilitation standards, backfill procedures and longhole production prints using Deswik for the operation of a junior underground gold mine
- Conducted ventilation surveys and formed plans to monitor and achieve adequate CFM and gas levels
- Conducted pull tests to monitor and assess ground support and send out weekly geotechnical reports
- Assisted in underground surveying using Trimble to install control points and pick up headings, bridging the mine plan with mine operations
- Restructured KPI database management from Excel to Power BI and SQL for effective data visualization

Mining Engineer Co-op <i>Suncor Energy Inc.</i>	May 2022 – Aug 2023 Fort McMurray, AB, Canada
<ul style="list-style-type: none">Planned daily oil sands excavation on MicroStation by assessing operational and geological factors for a fleet of 9 electric rope shovels and hydraulic shovels, achieving target production of 18000 tphDesigned and monitored the construction of temporary and semi-permanent haul roads with operators and optimized haul efficiency by planning and designing ramps to reduce travel distancePlanned and monitored placement for waste dumps and tailings dyke construction using WencoCollaborated with field leaders and geologists to monitor plan compliance from daily field tours	

RESEARCH EXPERIENCE

Undergraduate Mineral Processing Student Researcher <i>Norman B. Keevil Institute of Mining Engineering</i>	May 2021 – Aug 2021 Vancouver, BC, Canada
<ul style="list-style-type: none">Conducted comminution tests (supervised by Dr. Bern Klein and PhD student) on ore samples with the piston-press and high-pressure-grinding roll to determine if their production rate is related and scalableOperated crushers, sieves, and splitters on to prepare mineral samples for feed into the machinesModeled the effects of particle size and energy draw of the high-pressure-grinding roll using MATLAB	

TECHNICAL PROJECTS

Open Pit Mine Design Event <i>Canadian Mining Games</i>	Mar 2023 – Mar 2025
<ul style="list-style-type: none">Designed the brownfield pit expansion for a copper-molybdenum deposit from block model, geotechnical, fleet, mill and financial parameters that extend the mine life by 20 years achieving an NPV of \$4MDesigned blasted footwall pit shells as well as dump and reclamation to accommodate productionScheduled production and evaluated feasibility of upgrades towards mill recovery and throughputWon first place in the event for two consecutive years (2024, 2025)	
Capstone Project: Mine-to-Mill Blend Optimization at Highland Valley Copper Mine <i>Teck Resources Ltd.</i>	Sep 2024 – Apr 2025
<ul style="list-style-type: none">Created a mixed-integer linear program on Python to determine an optimal allocation of dump loads to different crushers based on ore hardness, haul distance and queue time to maximize production, report hereUtilized machine learning to establish a relationship between parameters for the objective function	
MATH 441 Combinatorial Optimization Project: Forming the Best Basketball Team <i>University of British Columbia</i>	Sep 2024 – Dec 2024
<ul style="list-style-type: none">Developed variations of knapsack combinatorial optimization programs that form an ideal NBA team by choosing players that either maximize team net rating or player efficiency rating or minimize weighted distance of NBA stats compared to league leaders, report hereObtained team selection of players with 36% average higher performance statistics	
CPSC 330 Applied Machine Learning Mini-project: Predicting Credit Card Default <i>University of British Columbia</i>	Sep 2024 – Dec 2024
<ul style="list-style-type: none">Developed different machine learning models and tuned their hyperparameters to obtain a 75% accuracy in predicting credit card default	

LEADERSHIP AND VOLUNTEERING

Captain <i>UBC Mining Games Team</i>	Sep 2022 – Apr 2025 University of British Columbia
<ul style="list-style-type: none">Represented UBC at the annual Canadian Mining Games, a national intercollegiate mining engineering competition, and won first place overall for two consecutive years (2024, 2025)Managed a team of 16 members to represent UBC at the 35th (2025) Annual Canadian Mining Games held in Quebec City through obtaining sponsorships, planning travel, and preparing/competing in eventsCompeted in the Open Pit Mine Design event and won two consecutive years (2024, 2025)	
Council Member – Clubroom and Clothing Representative <i>UBC Mining Undergraduate Society</i>	Sep 2023 – Apr 2025 University of British Columbia
<ul style="list-style-type: none">Designed and sold merchandise for the UBC mining engineering department to promote departmental spiritMaintained and upgraded resources for the department clubroom to facilitate learning and professionalism	

AWARDS

Eldridge Memorial Prize – UBC graduating student with the highest standing in mining engineering	May 2025
1st Place Canadian Mining Games – UBC won Canadian Mining Games two straight years	Mar 2024, Mar 2025
1st Place Open Pit Mine Design – won individual event two straight years	Mar 2024, Mar 2025
Patricia M. Mohr Award in Engineering – top 25% of UBC Applied Science and high career ambition	Nov 2024
James Marlow Scholarship in Mining Engineering – UBC achievement for proficient mine design	Nov 2024
Don Lindsay Teck Award in Mining Engineering – UBC Mining academics, leadership, extra-curricular	Oct 2024
CMIEF Scholarship – awarded by CMIEF for industry commitment	May 2024
Undergraduate Student Research Award (USRA) – awarded by NSERC to work on research project	Jul 2021