Hares Noori

Mining Engineer · Mining AI · Independent technical review

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PROFILE

Mining engineer who works in the field and applies AI. Experience spans exploration drilling, underground technical services, two remote mining operations at Ashaka in Nigeria, placer-gold operations in the mountains of Badakhshan, underground automation studies from Sweden and Finland to El Teniente in Chile, costed engineering options and mine-ventilation research for a planned rare-earth mine in Norway. As Senior Associate at MinEx Associates, provides independent, evidence-traced fatal-flaw assessments of mining and exploration projects for investors, lenders and project owners.

CORE STRENGTHS

Operations and people leadership • Mine engineering and technical services • Automation and operating systems • Mine ventilation (VentSim, CFD) • Project economics and costed studies • Geospatial analysis and data quality • Human-in-the-loop AI workflows • Client, regulator, community and supplier coordination • Multilingual international work

PROFESSIONAL EXPERIENCE

Senior Associate | MinEx Associates, London | Oct 2026 – present

- Independent fatal-flaw assessments of mining and exploration projects for investors, lenders and project owners, alongside Principal Associate Steve Canby.

Founder and Lead Researcher | Mining Research Unit / Placer Gold Research Group | 2025 – present

- Compiled a source-checked dataset of 40+ mineral occurrences and built an exploratory, weighted Placer Suitability Index in Python and QGIS across north-eastern Afghanistan (not field-validated), plus independent placer-gold scenario economics.

Technical Director – Mining | Jaihoon, Badakhshan, Afghanistan | Sep 2025 – Jul 2026

- Ran placer-gold mining operations across projects in the mountains of Badakhshan.
- Planned water capture and conveyance and adapted the staged water-transfer layout to pipe-sizing constraints.

Independent PhD Researcher | Doctoral research at RWTH Aachen University (EU Horizon REESOURCE) | Dec 2023 – present

- Research Associate (Wissenschaftlicher Mitarbeiter) at the Institute for Advanced Mining Technologies (AMT), Dec 2023 – Sep 2025: led a 1.5-year ventilation work package for a planned Norwegian rare-earth mine.
- Built a mine-wide VentSim network model for airflow, pressure, resistance and extraction-stage analysis, and led local CFD work on flow distribution, mixing and recirculation, keeping geometry and assumptions consistent across both scales.
- Since October 2025, doctoral research continued independently.

Co-Founder | Celestium Gemlink, London | Aug 2024 – Sep 2025

- Supplier outreach and UK import models for responsibly sourced gemstones: provenance, customs, sanctions and anti-money-laundering requirements, and routes to the London market.

Master's Thesis Researcher | Sandvik BU Automation, Tampere, Finland; El Teniente, Chile | Feb – Aug 2023

- Thesis on mine-design requirements for AutoMine® underground load-and-haul automation: mine layouts, connectivity and control-room configurations for simulation, and best-practice guidance.
- Saw automation deployed at full scale underground at El Teniente, Chile.

Technical Services | New Boliden, Garpenberg, Sweden | Jan – Apr 2022

- Built a costed ore-transport automation study comparing OEM pathways using haulage simulations and supplier quotations; contributed to a preliminary ore-pass expansion plan.

Mining Engineer, Technical Services | British Fluorspar, Peak District, UK | Apr – Aug 2021

- Underground mine planning through orebody analysis, stope design and ventilation; equipment procurement and operating-system improvements; planning-permission, regulatory and community work. The operation received exemplary Mines Inspectorate HSE inspection results as a team.

Founding President | DEWERCO & TSP, Afghanistan | Aug 2020 – Aug 2021

- Technical-commercial proposals for mining modernisation and processing opportunities across coal, talc, marble and nephrite.

Project Manager | PW Mining International (PW Nigeria), Ashaka, Gombe State, Nigeria | Aug 2019 – Jun 2020

- Led two remote mining operations, one with a workforce of more than 150, almost entirely hired locally and upskilled to British standards.
- Introduced a preventative-maintenance regime; delivered the repaving of 100+ km of the Ashaka–Gombe highway; handled community relations with elders and tribal authorities.

Research Engineer Intern | Komatsu Ltd / Joy Global, Worcester, UK | Jun – Sep 2018

- Modelled product performance across geological conditions, ran coal-friability breakage tests and evaluated the Opti-Drive system.

Exploration Driller | MSJ Drilling Services, Drakelands mine, Hemerdon, Devon | Jun – Sep 2017

- Surface diamond-core and reverse-circulation drilling for tungsten and quartzite exploration to depths of up to 500 m; core logging and 3D block models in Leapfrog Geo.

EDUCATION

MSc European Mining Course | TU Delft, Aalto University and RWTH Aachen University | 2021 – 2023

- Thesis: Optimisation of mine-design requirements for underground load-and-haul automation applications.

BEng (Hons) Mining and Minerals Engineering | Camborne School of Mines, University of Exeter | 2016 – 2019

- Dissertation: Preliminary Economic Assessment of a Finnish gold resource (academic case study).

TECHNICAL SKILLS

Mining software: Deswik, VentSim, CFD, MicroMine, Leapfrog Geo, RocScience; Surpac and Datamine (coursework).

Mining engineering: mine planning and scheduling; underground layouts and stope design; mine ventilation; haulage and ore transport; automation requirements; capex, opex and sensitivity analysis.

Data and AI: Python and Jupyter, SQL, Power BI, advanced Excel; data modelling and data quality; human-in-the-loop AI workflows.

GIS: QGIS and PyQGIS; terrain derivatives, flow accumulation, drainage extraction; raster and vector modelling; occurrence datasets.

LANGUAGES AND MEMBERSHIPS

Languages: English and Dutch (fluent); Dari, Persian and Pashto (fluent); German (working proficiency).

Memberships: Associate Member, Institute of Materials, Minerals and Mining (IOM3); Camborne School of Mines Association; Young Mining Professionals Network UK.