

GUL RAZIQ

Geotechnical Engineer | Engineering Geologist | Field Geologist | Site Investigation & Slope Stability Specialist

geologistgulraziq@gmail.com | +966 560 047 827 | Al Hofuf, Saudi Arabia | www.linkedin.com/in/gul-raziq

Geotechnical Engineering • Site Investigation • Borehole Logging • Rock Hazard Rating System • Technical Reporting

PROFESSIONAL SUMMARY

Engineering Geologist and Geotechnical Specialist with 6+ years of hands-on experience in engineering geology, geotechnical site investigation, field geology, borehole logging, in-situ testing (SPT/CPT/FDT), data management, and preparation of Geological map, engineering geology, slope stability and geotechnical reports across Saudi Arabia and Pakistan. Proven ability to supervise field investigations, check and validate borehole logs and laboratory test data, rock mass characterization (RMR, SMR, and GSI), slope stability assessment, kinematic analysis, and rockfall hazard evaluation (RHRS) and develop foundation soil parameters for engineering analyses aligned with international codes and client specifications. Experienced in multi-disciplinary team coordination, HSE compliance, and quality assurance throughout the full project cycle — from field data collection through to final report delivery. Strong technical report writing skills in English, with a consistent record of meeting project deadlines and client expectations.

CORE COMPETENCIES

Field Investigation & Subsurface

Borehole Logging & Supervision
SPT / CPT / FDT, In-Situ Testing
Core Logging, Lithological Identification & Samples, Drilling Parameter Monitoring & Supervision, 3D Subsurface Modelling

Engineering Geology & Analysis Reporting

Rock Mass Classification — RMR, SMR, GSI, Rockfall Hazard Rating System (RHRS), Scanline Surveys & Slope Face Mapping, Slope Stability Analysis & Kinematic Analysis, Wedge, Planar & Toppling Failure Analysis (Swedge, Rocplane, Dip) & Trajectory Simulation (Rockfall3)

Project & Quality Management

Geological & Engineering Mapping, geological Risk Assessment, Geological Maps & Subsurface Profiles, Technical Report Preparation (12+ reports), international Geotechnical Standards, Field Data Management & Geological Databases, Multi-disciplinary Team Coordination ArcGIS, Surfer, Rocscience Suite, Global Mapper, Agisoft & Cloudcompare

PROFESSIONAL EXPERIENCE

Engineering Geologist | Exploration Geologist

GeoSync | Islamabad, Pakistan

Jun 2025 – Dec 2025

- Executed Rockfall3, Rocscience (Slide, Swedge, Rocplane), ArcGIS, and Surfer-based geotechnical modeling for trajectory simulations; outputs adopted in final engineering design.
- Conducted real-time erosion and weathering mapping for the DHA project, compiling findings into actionable mitigation reports submitted to project leads.
- Produced geological maps and subsurface profiles for a damaged RCC retaining wall and failed slope at Musharaf Road, DHA-IV, supporting stabilization design including rock bolts, shotcrete, and soil nailing.
- Prepared 12+ comprehensive site investigation reports and geological logs aligned with international and Pakistan project standards within tight project deadlines; managed all data from field to client submission ensuring correct formats and QA compliance.
- Delivered RHRS and rock mass classification (RMR, SMR, GIS-based) assessments for the IMDC Murree Project, evaluating high-risk slope stability across 10+ critical slope sections, directly informing design mitigation strategies.** Key Achievement

Structural Geologist (Deployed via GeoSync)

Riyadh Geotechnique and Foundation (RGF) | Jeddah, Saudi Arabia

Jun 2024 – May 2025

- Conducted slope stability assessments using RMR, SMR, and GSI, supported by kinematic analysis (Dips, Rocplane, Swedge, Rockfall3) to deliver reliable inputs for geotechnical design.
- Reviewed and validated slope mapping, scanline, and RHRS data, ensuring accuracy and consistency in engineering geology reports.

- Assessed 564+ slope sites across Saudi Arabia, providing real-time field data and preparing clear geotechnical reports to support effective slope stabilization measures.
- Maintained full compliance with HSE standards, contributing to a safe and incident-free work environment.
- Collaborated with multidisciplinary teams to communicate geological risks and support timely, informed project decisions.

Engineering Geologist | Exploration Geologist

GeoSync | Islamabad, Pakistan

Jul 2023 – May 2024

- Conducted antimony mineral exploration surveys across prospective zones, applying geological mapping and data interpretation to support resource evaluation reporting.
- Delivered geotechnical consultancy and produced detailed technical reports for 5+ projects, improving engineering decision-making and project planning outcomes.
- **Carry out 3D subsurface models from tube-well data for rainwater harvesting and improving groundwater analysis accuracy for municipal planning.** Key Achievement

Field Geologist

Deep Rock Drilling Private Limited (DRD) | Karachi, Pakistan

May 2022 – Apr 2023

- Supervised diamond core drilling operations for mineral exploration within a porphyry copper deposit (Chaghi), demonstrating rigorous quality control, safety compliance, and field supervision capability.
- Monitored real-time drilling parameters, borehole progress, and core recovery; resolved technical issues directly with drilling crews, ensuring all field data was captured accurately and submitted in required formats.
- **Fulfil comprehensive geological databases, consistently achieving 95%+ core recovery rates and borehole records, producing detailed geological logs and exploration deliverables aligned with client specifications and geotechnical standards.** Key Achievement

Field Geologist

Universal Drilling Engineers | Lahore, Pakistan

Apr 2021 – Mar 2022

- Logged cores, collected soil and rock samples, and conducted laboratory analysis (SPT/CPT and ASTM testing) across 18+ boreholes; collaborated with geotechnical engineers to refine investigation procedures and improve borehole data quality.
- Supervised site investigation and diamond drilling activities, applying leadership and problem-solving skills to deliver high-quality geotechnical data that supported foundation design and infrastructure projects.
- Prepared field logs and site investigation records, coordinating with project engineers to ensure all in-situ testing and sample collection were completed in accordance with project requirements.

Field Geologist

Khyber Geotechnical Services | Peshawar, Pakistan

Apr 2020 – Mar 2021

- Directed site investigation drilling across 44+ boreholes, administering SPT and CPT in-situ tests per ASTM standards; supervised field personnel and ensured all geotechnical data collection met client specifications and quality benchmarks.
- Coordinated daily client site visits and real-time progress updates, facilitating clear communication between field crews and project management to ensure all engineering requirements were met throughout the investigation program.
- Collected, preserved, and documented soil and rock samples per geotechnical standards; prepared field logs and drilling records for engineering analysis and client submission.

Geotechnical Intern

National Centre of Excellence in Geology | Peshawar, Pakistan

Sep 2019 – Mar 2020

- Conducted ASTM-compliant laboratory testing including Point Load, UCS, Direct Shear, Particle Size Distribution, and LA Abrasion tests — building foundational skills in geotechnical data collection and laboratory reporting.
- Supported geological mapping fieldwork and contributed to multidisciplinary geotechnical integration projects, developing early competency in field-to-office data workflows.

EDUCATION

Bachelor of Science – Geology

Shaheed Benazir Bhutto University, Sheringal, Pakistan | GPA: 3.43 / 4.0 | Graduated: Sep 2019

Diploma – Materials Testing

Harris Institute of Technology, Pakistan | 77.33% | Dec 2018

TECHNICAL SKILLS & SOFTWARE

Geotechnical	Borehole Logging, Core Logging, SPT/CPT/FDT Testing, Rock Mass Classification (RMR/SMR/GSI), Rock Hazard Rating System, Slope Stability Analysis, Subsurface Interpretation
Software	ArcGIS • Surfer • Global Mapper • Rocscience Suite (Slide, Dip, Swedge, Rocplane) • Rockfall3 • Agisoft • Cloudcompare • Shapematrix
Laboratory	ASTM Testing: UCS, Point Load, Direct Shear, PSD, LA Abrasion
Compliance	HSE Standards (KSA) • International Geotechnical Standards • Technical Report Writing

CERTIFICATIONS

- Drone & DGPS Survey – Certified (Mar 2024, Non-expiring)

LANGUAGES

English – Intermediate | Urdu – Fluent | Pashto – Native

REFERENCES

Dr. Sarfraz Ali – Chief Executive, GeoSync | sarfrazaliengr@gmail.com

Dr. Esamaldeen Ali – Project Manager, ERI – Engineering & Research International | esamali77@gmail.com