

EDUCATION	Ph.D. Student, Civil Engineering Specialty: Geotechnical Engineering Portland State University	2024 – present
	Master of Science, Civil Engineering California State University, Fullerton	2019 – 2021
	Bachelor of Science, Civil Engineering California State University, Long Beach	2011 – 2016
	Engineer-In-Training California NCEES, No. 15-940-42	
ACADEMIC EXPERIENCE	Portland State University College of Civil and Environmental Engineering <i>Graduate Research Assistant</i>	2024 – present
	I. Perform laboratory work and literature review focused on investigating relationships between soil type, properties, initial conditions, CSL position and shape, and CPTu data. II. Involved in outreach events and attend weekly group and advisory meetings.	
PROFESSIONAL EXPERIENCE	BMSC Construction, Inc. <i>Owner</i>	2017 – present
	I. Licensed residential general contractor. Overlook the planning and completion of residential remodeling projects. Tasks include client outreach & bidding, project coordination & organization, quality control manufacturing, and other deliverables. Responsible for ensuring projects are met within the specified timeframe, budget, and scope.	
	SRK Consulting, Inc. <i>Geotechnical Engineering Consultant</i>	2022 – 2024
	I. Performed Tailing Storage Facility (TSF) Design for mines in the United States and Mexico. Experienced in providing Stability Technical Memorandums, Slope Stability and Liquefaction Reports, Geotechnical Interpretation Reports, Shear Strength Memorandums, and Operation, Maintenance & Surveillance (OMS) Manuals. II. Responsible for interpreting groundwater instrumentation data in Tailing Storage Facilities. III. Performed drilling oversight to evaluate soil strength properties used for buttressing and TSF expansion.	

American Geotechnical, Inc.
Forensic Engineering Consultant

2021

- I. Worked closely with local agencies to perform forensic engineering studies on structures and roadways deemed to be compromised. Main field duties included percolation testing, sand cone testing, and manometer mapping/surveying.

Group Delta Consultants, Inc.
Staff Engineer

2018 – 2020

- I. Extensive experience with data management and instrumentation for the *Westside Subway Extension* project in Los Angeles, California. Main duties included overseeing daily tunnel & station excavations, processing daily surveying data to determine settlement due to excavation activities, generating weekly reports summarizing work performed at tunnels and stations (i.e., excavations, dewatering, installation of instruments, etc.), and ensuring the overall safety of the project and its surroundings.
- II. Performed extensive drilling oversight as part of the Los Angeles World Airports (LAWA) *Automated People Mover* project. Field work consisted of soil exploration throughout LAX. Field work was performed within schedule, without major setbacks, and without interrupting airport services.
- III. Actively involved in foundation design for bridge and building structures. Duties ranged from performing field work to determining soil properties and interpreting and analyzing data as part of a Foundation Report (FR).
- IV. Served as the Control Quality Assurance (CQA) manager to implement a Construction Quality Assurance Plan (CQAP) for work involving the construction of a soil and asphalt cap cover on the inactive 3.5-acre *Phillips Ranch Landfill* in Pomona, California.
- V. Extensive field experience with soil exploration activities, including hollow-stem auger, mud-rotary, CPT, mass grading oversight, set-up and performance of infiltration tests (percolation, double ring, etc.), and trench construction oversight.

Harrington Geotechnical Engineering
Lab Technician

2017 – 2018

- I. Performed soil characterization in accordance with ASTM & USCS classification standards. Tests include but are not limited to Moisture Content & Dry Unit Weight, Maximum Dry Density/Optimum Moisture Test, Expansion Index, Sieve Analysis, Hydrometer Analysis, Consolidation Test, Direct Shear Test, Sand Equivalent, Atterberg Limits, and Concrete Compression Testing.
- II. Analysis of foundation design and liquefaction susceptibility of residential structures.
- III. Performed residential and public fieldwork, including but not limited to footing inspection, rough & finish grade inspection, trench excavation & backfill inspection, soil drilling and sampling, sand cone testing, percolation testing, forensic studies, and manometer mapping/surveying.

INTERNSHIPS

City of Redondo Beach, Public Works
Transportation Engineering Intern

2017

- I. Designed areas for public parking in accordance with Municipal Code.

- II. Conducted traffic impact studies and analyzed traffic volume to determine efficient street designs.
- III. Performed field studies to evaluate and increase pedestrian safety.

City of Torrance, Public Works
Transportation Engineering Intern

2013

- I. Drafted public streets and parking lots in AutoCAD.
- II. Observation and inspection of asphalt poring and sewage pipe installation.
- III. Analyzed traffic control data and created street rehabilitation designs.

Group Delta Consultants
Geotechnical Engineering Intern

2012

- I. Soil exploration, identification, and classification (ASTM).
- II. Evaluation of structure stability and bearing capacity based on soil properties.
- III. Created boring logs on gINT and analyzed geological data maps.
- IV. Inspected sites for soil conditions and created AutoCAD maps and graphics of cross-sectional areas.

**SKILLS &
 ADDITIONAL
 TRAINING**

- I. Knowledge of Slide, PowerBI, AutoCAD, gINT, LPILE, CPeT, CLiq, MS Office
- II. Nuclear Density Gauge Certified
- III. OSHA 10-hour and 40-hour HAZWOPER Certification
- IV. First Aid Certification
- V. Mine Safety and Health Administration (MSHA) Certification
- VI. Fluent in English and Spanish
- VII. Graduate Research Assistant – Characterization of ash and heat-treated soils obtained from several fires in Southern California. Testing of residual strength of ash and soil mixtures from field samples and comparing them to the strength of lab samples.
- VIII. **TailENG Courses:**
 Fundamentals of Tailings Engineering
 Static and Cyclic Liquefaction of Mine Tailings
 Geotechnical Analysis of Waste Storage Facilities
- IX. **Edumine Courses:**
 Responsible Tailings Management 101
 Tailings Facility Design, Operation, and Closure
 Groundwater in Mining
 Surface Water Management at Mines