

S. Philip Pachade, EIT

Houston, TX, USA

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EDUCATION

Western University

Master of Engineering in Structural Engineering

London, ON

Jan 2022-Dec 2022

Colorado School of Mines

Graduate Certificate in Underground Construction & Tunnel Engineering

Golden, CO

Jan 2021-Dec 2021

Rutgers University

Bachelor of Science in Civil Engineering

Piscataway, NJ

Sep 2016-May 2020

OBJECTIVE

Results-oriented Engineer-In-Training with experience in geotechnical and structural engineering, along with strong numerical modeling skills, seeking an exciting and challenging career that enables me to work on technologically advanced projects and grants me the opportunity to innovate and enhance my technical skills while progressing the company to new milestones.

PROFESSIONAL SKILLS

- Experience with AutoCAD/Civil 3D, Revit, ETABS, SAP2000

WORK EXPERIENCE

Socotec USA

Building Envelope Inspector

Houston, TX

Jan 2023-present

- Understand exterior wall construction project phases including but not limited to drawing, modeling, design development and construction documents.
- Conduct field review and progress inspection on designated projects.
- Advise PM on status, scheduling, effort of work and estimates for completion.
- Familiarize with building codes in local markets.

Mott MacDonald

Tunnel Engineer I

Iselin, NJ; Toronto, ON

Feb 2020-Dec 2022

- Design various underground structures such as shafts, tunnels, and portals.
- Develop cost estimates, schedules, and reports for underground infrastructure projects.
- Generate tunnel drawings including plans, profiles, cross sections, and details.
- Identify structural deficiencies in on-site tunnel condition assessment surveys.
- Digitize field notes to enhance clarity, document immediate action repairs, and enumerate structural deficiencies.
- Created a geologic profile utilizing AutoCAD Civil 3D that expedited the design process of a 44,000 feet wastewater tunnel.
- Visually inspected 10,000 feet of an aqueduct for structural deficiencies.

UNIVERSITY PROJECTS

Advanced Design & Behaviour of Steel Final Project | Design of industrial steel warehouse

Dec 2022

- Designed a warehouse using ETABS and developed structural drawings utilizing REVIT.
- Implemented structural design checks for shear, bending moment, and axial forces applied on the building.
- Performed snow and wind load calculations according to the NBCC 2020 code provisions.
- According to factored moments and axial forces, selected section sizes using CISC handbook for columns, beams, and girders.

Building Information Modeling Final Project | Modeling of a six-storey hotel

Jun 2022

- Modelled a six-storey hotel using REVIT.
- Added architectural and structural components into the model using REVIT.
- Developed plan/elevation views of the building.
- Created door, window, wall, and room scheduled using REVIT.

Building Sustainability | Design of Climate Responsive One-story home

Dec 2022

- Modelled a one storey climate responsive residential house on Sketchup using the three-tier design approach.
- Optimized the house orientation based on sun path, wind wheel, and psychometric chart for Houston TX.
- Used passive cooling techniques to increase natural ventilation and protect from humidity/high temperatures.
- Completed a LEED certification checklist for the home.