Adam Babar

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Education and Credentials

Toronto Metropolitan University

Toronto, ON

B.Eng, Civil Engineering: Structural Specialization

September 2019 - April 2024

- Registered Engineer-in-Training (EIT) with APEGA
- Fundamentals of Engineering Exam (FE-Civil) Scheduled for Oct. 2025

Skills

- Structural Design/Drafting: AutoCAD, RISA Suite, SAP2000, Civil 3D, Navisworks, Revit, Bluebeam, LPILE
- Design Codes and Standards: CSA S16, A23.3, S6, O86, NBCC, AISC, ACI, AASHTO
- Languages and Productivity: C, VBA, MATLAB; Microsoft Project, Excel, Word, PowerPoint, Power BI
- Soft Skills: Time management, analytical thinking, leadership, interpersonal communication, adaptability

Work Experience

EllisDon VDC Associate, EIT Edmonton, AB

September 2024 - Present

- Produce 3D structural models (Civil 3D, Revit, SketchUp) to support the design and visualization of site infrastructure, buildings, trench excavations, and utility systems for project planning and client presentations
- Prepare structural and earthworks quantity take-offs (concrete, steel, excavation/backfill) for engineers and estimators to inform accurate cost estimates and project feasibility during the bid preparation process
- Develop VR/AR models to identify design clashes, evaluate constructability, and plan installation sequencing

Safe Roads Engineering Structural Design EIT

Aurora, ON

June 2024 - August 2024

- Conducted detailed 3D structural and geotechnical analysis for transportation structures, including bridges and culverts, ensuring compliance with the CHBDC to optimize structural integrity and meet safety standards
- Utilized various software, including SAP2000, AutoCAD, and MS Project, to support the coordination of transportation engineering projects and ensure seamless progression through each project stage
- Prepared technical reports, time-task matrices, and Gantt charts to support design-bid packages and revenue goals

Kiewit Corporation Structural Design Intern

Toronto, ON

May 2023 - September 2023

- Developed calculation packages using Mathcad for temporary construction systems (shoring, formwork, lift plans), aligning with CSA, NBCC, and other applicable standards to support permanent structure implementation
- Created AutoCAD drawing packages and structural models (RISA-3D, Midas Civil) for geotechnical and structural engineering projects to accurately represent specifications and present them to site engineers
- Performed field inspections of temporary structures to confirm design adequacy and construction safety

Leadership and Projects

Toronto Metropolitan University

Toronto, ON

Capstone Design Project: Concrete Arch Bridge

September 2023 - April 2024

- Designed and delivered a Concrete Landmark Arch Bridge, integrating structural analysis, finite-element analysis, design standards, and constructability considerations
- Awarded Best Capstone Project of 2024, recognized for innovation, structural efficiency, and design quality

First-Year Engineering Ambassador

April 2022 - January 2024

- Mentored first-year civil engineering students to support academic transition and stronger program engagement
- Led orientation workshops for 100+ students to encourage collaboration and connect them to academic support