

MINA N. M. BOTROS

EDUCATION

Massachusetts Institute of Technology
School of Engineering & Sloan School of Management
M.S., Engineering Management

Cambridge, MA
2015-2017 (expected)

University of Calgary
Schulich School of Engineering
B.Sc., Mechanical Engineering

Calgary, AB
2005-2009

PROFESSIONAL EXPERIENCE

TECHNOLOGY STRATEGY PARTNERS

Cambridge, MA
2016

Associate, Consultant
Strategy

- Created models to assess the effect of product pricing points on consumer buying habits and forecasted sales.
- Investigated several value creation frameworks to achieve clients' revenue growth targets.
- Helped clients apply holistic systems models to make business decisions and to meet their strategic visions.

Operations

- Conducted diagnostic interviews with key stakeholders within clients' organizations.
- Worked with clients to identify and to analyze historical data for model creation, calibration and testing.
- Conducted analyses to identify potential common product platform parts or new architectures.
- Conducted financial analyses to assess the profitability of product platforms.

JACOBS CANADA INC.

Calgary, AB
2011 – 2016

Project Engineer, Team Lead (P.Eng.)

- Managed several multi-million dollar concurrent oil sands projects including shared scope with Mumbai office.
- Prepared engineering budgets and staffing plans, and compiled monthly-earned value reports.
- Reviewed, signed, and stamped all construction documents and building permit applications.
- Analyzed historical labor reports, and presented resource cross utilization plan to management to increase productivity. Projected savings to clients ranged from \$100k to \$250k depending on project scope.
- Evaluated various contracting strategies to save clients \$150k per project by shifting scope of supply with a minor increase in schedule risk.

ACADEMIC EXPERIENCE

SYSTEM DESIGN AND MANAGEMENT PROGRAM at MIT

Cambridge, MA
2016 - Present

Head Teaching Assistant

- Lead a team of 5 teaching assistants.
- Liaise with course instructors to build lecture and recitation schedule.
- Teach a two-hour class once per week to 107 students.
- Create grading rubrics; handle teamwork conflicts and moderate online class forum.
- Collaborate with the program's staff to promote it across MIT and to industry sponsors.
- Mentor five industry sponsored term projects in the areas of architecture, technology maturation and roadmapping, process implementation and business case evaluation.

GLOBAL TEAMWORK LAB

Cambridge, MA
2016 – Present

Researcher

- Design a resource allocation framework to advance project portfolio management practices.
- Participate in designing experiment to detect correlations between participants' mental models and project performance.
- Organize research symposia and conferences with colleagues from the University of Tokyo.
- Advise industry research partner on strategic organizational design and its effect on innovation and process implementation.