

Shwe Myat Myo Oo, EIT, LEED AP BD+C

· shwe.mmo1@gmail.com

Website: www.ramblinrekt.com · LinkedIn: <https://www.linkedin.com/in/shwe-myat-myo-oo/>

Education

Northeastern University, Boston, MA

Sep 2019-Dec 2021

- Master of Science in Energy Systems

Georgia Institute of Technology, Atlanta, GA

Aug 2012-Dec 2016

- Bachelor of Science in Mechanical Engineering (Dean's List)
- Business certificate in Entrepreneurship (Scheller College of Business)

Certificates and Skills

Certificates:

Engineer-In-Training (EIT), LEED AP BD+C, Certified SolidWorks Associate (CSWA), Introduction to Computational Fluid Dynamics (ASME EL 513)

Mechanical Engineering:

Computational Fluid Dynamics, Finite Element Analysis, Thermal Analysis, Machine Design, Renewable Energy System Design, Design Research

Languages:

Burmese—native, Japanese—conversational

Programming Languages:

Python, MATLAB

Hardware:

3D printer, mill, lathe, laser cutter, drill press, band-saw, soldering equipment, power tools, laser thermometer, lux meter, breadboard circuit building, function generator, oscilloscope, multi-meter, Scanning Electron Microscope

Software:

Computer Aided Design:

Autodesk Revit, AutoCAD, SolidWorks

Building Systems Simulation:

Carrier HAP, eQuest, DesignBuilder, DuctSize, FluidFlow, CHVAC

Simulation:

ANSYS Mechanical, ANSYS Fluent

Engineering Computation:

MATLAB, Engineering Equation Solver (EES)

Applications:

Microsoft Office Suite (Word, Excel, PowerPoint, Access, OneNote, Outlook), Google collaboration packages (Docs, Sheets, Slides), Trello, Slack

Web Design:

WordPress

Communication:

Technical Reports, Oral Presentations, Public Speaking, Team Leadership

Experience

AHA Consulting Engineers

Jan 2022-Present

Mechanical Design Engineer, Energy Modeler

- Designed HVAC systems for various projects such as healthcare facilities, academic institutions, biotechnology labs, and other use cases, including ductwork, piping, equipment layout, cooling and heating load calculations, and equipment sizing
- Prepared engineering studies, schematic design, and design development documents for new systems in consultation with lead engineer
- Created energy models for LEED certification and tax rebate incentives referencing ASHRAE 90.1 Appendix G
- Performed site visits to client sites to evaluate existing systems

Roland Berger

Jan 2021-Apr 2021

Consulting Intern

- Collaborated with partners, managers, senior consultants, and Yangon government officials to finalize a Swiss Challenge tender process for the New Yangon City (NYC) industrial park project with an investment target of \$1.5 billion
- Performed vendor due diligence assignments with supervision of senior consultant for the acquisition of a multinational company in Asia specializing in distribution/mailroom services, cash management, and records management
- Performed translation work (English to Burmese and vice versa) on an end-user handset survey for a telecom project with a Japanese multinational company

Winter ACMV Co., Ltd,

Feb 2017-Aug 2019

Lead Engineer—Technical Development Division

- Designed HVAC systems for 4 high-rise building projects such as offices and hospitals with gross floor area over 600,000 ft² to comply with building/project requirements, including load calculations, equipment selection and sizing, mechanical equipment room design, duct and piping design and layout for development of HVAC plans
- Developed a custom software package over 6 months to calculate capacity loss for a heat pump of arbitrary cooling capacity operating under non-rated conditions with refrigerants R22 or R134a, reducing maintenance costs from inaccurate benchmarks by 20% and resulting in over \$100k in savings

- Leveraged commercial computational fluid dynamics (CFD) software packages to analyze building ventilation systems for energy efficiency and optimization, increasing client cost savings by up to \$75,000
- Automated calculation of staircase pressurization requirements for high-rise buildings with Excel as specified in ASHRAE and local standards, reducing calculation time by 50%
- Taught and supervised usage of commercial and custom HVAC software solutions to cross-functional team of 4 engineers for 8 months
- Coordinated air washer and chiller equipment installation and troubleshooting inspections in 1 textile factory and 2 hospitals
- Improved team workflow by applying Kanban principles via Trello, increasing work efficiency by up to 30%

Winter ACMV Co., Ltd

May 2016-July 2016

CAD Drafting and Equipment Testing Intern (Georgia Tech Global Internship Program)

- Conducted troubleshooting analysis of 200 RT chiller plant equipment at field testing sites and produced inspection reports
- Performed design work and CAD drafting for HVAC system sizing and duct runs in a 300,000 ft² high-rise building project
- Rebuilt and launched company website, resulting in a 15% increase in site exposure

Projects, Leadership, and Research

Northeastern University Sustainable Building Organization (NUSBO)

Sep 2019-Apr 2020

Student Representative

- Represented NUSBO at biweekly campus-wide sustainability meetings
- Coordinated with 6 other team members in weekly meeting setup and attendance tracking for over 30 team members

Students for the Exploration and Development of Space (SEDS)

Sep 2019-Dec 2019

Northeastern University CubeSat Team Member

- Collaborated with team of 20 from Tufts, MIT, and NEU to meet individual project deadlines on time and under budget
- Taught thermal simulation to NEU team of 5 and applied thermal design concepts to nanosatellite design

Myanmar National Building Code (MNBC) Working Committee

Jan 2019-Feb 2019

Technical Contributor

- Collaborated with 3 other reviewers in evaluating HVAC systems section
- Proposed 21 actionable code amendments and clause additions and presented proposal to technical working committee

Capstone Design Course at Georgia Tech (ME 4182)

Aug 2016 - Dec 2016

Team Leader

- Invented a hand tool with team of 6 to augment setting and application of e-clips in rail construction and maintenance work for corporate sponsor CSX Transportation
- Won 'Best Overall Project in Mechanical Engineering' award at GT Capstone Design Expo with \$1000 cash reward

Georgia Tech Solar Racing

Sept 2012 - Dec 2013

Team member

- Performed inertial and braking calculations for street-legal solar powered race car
- Assisted team leaders in testing solar panel and powertrain performance