Boon Siang Teh, B. Eng.

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SUMMARY

Graduate Engineer with 1 year of experience in **Mechanical Design**, **Finite Element Analysis (FEA)** and **Computational Fluid Dynamics (CFD)**. 2 years' experience in **Computer Aided Design (CAD)** and fully proficient with **AutoCAD** and **SolidWorks**. Basic proficiency with **Autodesk Revit**, **MicroStation**, Inventor and CATIA. Basic knowledge of **ASME B31.1 Pressure Piping Code** and **ASME Y14.5 Geometric Dimensioning and Tolerancing (GD&T)**.

EDUCATION

Bachelor's of Aerospace Engineering (Concentration: Mechanical Engineering) – (CGPA: 3.8)
Carleton University, Ottawa, Canada
September 2011 – April 2015

Relevant Courses: Mechanics of Solids, Fluid Mechanics, Thermodynamics and Heat Transfer

RELEVANT PROJECTS AND EXPERIENCES

Entry-Level Mechanical Engineer/Research Assistant **May 2014 - May 2015**
Carleton University Supercritical Refrigerant Loop Research Team, Ottawa, Canada

- Developed a mechanical traverse system for operation at temperatures and pressures of up to 250˚C and 7 MPa respectively and increased reliability of traverse system by adapting off-the-shelf parts for this application
- Ensured compliance of design with ASME B31.3 Pressure Piping standards for future Technical Standards and Safety Authority (TSSA) certification
- Prepared schematic drawings of traverse system and performed basic Finite Element Analysis (FEA) to verify structural integrity of branch connection of test section

Project Engineer (Design and Integration) **September 2014 - April 2015**
Carleton University Unmanned Aerial Vehicle (UAV) Capstone Project, Ottawa Canada

- Prepared all technical specifications of UAV to serve as a reference for the work of Aerodynamics and Structures team and generate monthly progress reports to Project Supervisor
- Reviewed all CAD submissions by colleagues and ensured compliance with technical specifications and standards
- Completed project 2 weeks ahead of schedule through constant design reviews and design troubleshooting and providing technical assistance to Aerodynamics and Structures team

Fighter Trainer and Takeoff and Landing System (TLS) Design Project **January 2014 – December 2014**
Carleton University, Ottawa, Canada

- Developed a conceptual design of a fighter trainer for the Royal Canadian Air Force (RCAF) and a redesign of Boeing Integrator's TLS for geophysical surveillance
- Prepared engineering calculations and detailed CAD drawings of fighter trainer and redesigned TLS using AutoCAD and PTC Creo (Pro/Engineer) respectively
- Increased reliability of redesigned TLS by employing Failure Modes and Analysis (FMEA) methodology on TLS

KEY SKILLS AND COMPETENCIES

CAD Software	AutoCAD, PTC Creo (Pro/Engineer), Autodesk Revit, MicroStation, Inventor, CATIA V5
Programming	C++, Simulink, Matlab, SQL, Java, HTML, CSS, JavaScript
Standards	ASME B31.1 Pressure Piping Code, ASME Y14.5 Geometric Dimensioning and Tolerancing