HAONAN LI (ALAN)

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- Industry experience in the management consulting, energy, and software sectors
- Working knowledge of SolidWorks, AutoCAD, and MicroStation
- Proficient in C/C++, HTML, CSS, XML, and SQL from university and work experience
- Adept at Excel, MATLAB, and PLC through academic and work assignments
- Seasoned project management skills from leading academic design projects
- Excellent communication skills developed from business-oriented roles during Co-op
- Studied abroad at the National University of Singapore

PROFESSIONAL EXPERIENCE

Junior Associate, Program Management Toronto, ON – 2012 (8 mo.)
SAPIENT GLOBAL MARKETS – *A leading provider of financial services to capital markets*

Project: Risk & Analytics Platform Replacement (for a major Canadian bank)
- Successfully ensured team deliverables were met under tight deadlines by coordinating stakeholder meetings to track overall project progress
- Streamlined existing data on departmental interactions by producing clearly-defined process flow diagrams of various departments within the capital markets division

Project: Public and Research Website Renewal (for a major Canadian bank)
- Created new web pages aimed at enhancing user interaction by utilizing current technology standards and incorporating modern graphic designs
- Improved team efficiency by creating UML architecture diagrams and analyzing a content management system for the software engineers

Instrumentation & Controls Engineering Student Calgary, AB – 2010-2011 (8 mo.)
PROJEX – *A provider of engineering and management services to the energy sector*

- Collaborated with senior engineers by revising: P&IDs, instrument indexes, control narratives, material requisition forms, and junction box drawings for a petrochemical terminal expansion project
- Created datasheets for various mechanical equipment to be used as a template by the mechanical engineers
- Worked with the following technologies: PLC, HMI, DCS, SIS, and Fieldbus

Applications Developer Ottawa, ON – 2010 (4 mo.)
DFO – *A federal leader in managing Canada's fisheries and safeguarding its waters*

- Efficiently maintained a geospatial metadata software as the administrator by deploying crucial applications and web pages in IBM RAD7 as well as repairing software bugs
- Successfully planned and documented the migration of existing metadata from the McKoi database management system to Oracle

EDUCATION

Mechatronics Engineering, Honours (GPA: 3.7/4.0 or 85%)
UNIVERSITY OF WATERLOO – *Graduating May 2014*
- Mechatronics Engineering is a multi-disciplinary field of engineering that incorporates both Mechanical Engineering and Electrical Engineering

PROJECTS

Ball and Beam Controller, Designer **2013**
Implementation of a feedback controller to balance a metal ball on a horizontal beam

Relevant Skills: MATLAB, Simulink, C/C++, Excel

- Derived physical modeling of the ball and beam apparatus using fundamental equations
- Designed a discrete-time controller in MATLAB Simulink and simulated closed-loop performance
- Implemented controller in the actual system and achieved excellent dynamic response

Autonomous Navigating Boat, Project Leader **2013**
Group of five people responsible for constructing a self-sensing, self-navigating boat capable of detecting its environment and adjusting its trajectory

Relevant Skills: SolidWorks, PID Controller, Arduino, C/C++, Excel, Project Management

- Responsible for overall project management (i.e. cost, scheduling, task assignment, and progress tracking)
- Designed, constructed, and tested mechanical components of the boat (ex. boat hull, motor and propeller position, and rudder size and shape)
- Provided recommendations to the software leads regarding the navigation algorithm
- Successfully met all major project objectives in a timely fashion

Crane Boom Design, Project Leader **2011**
Group of five people responsible for constructing a wooden crane capable of supporting 100 times its own weight

Relevant Skills: SolidWorks, Project Management

- Assessed key project requirements and delegated tasks to group members
- Designed, constructed, and tested the crane to achieve optimal performance
- Placed 3rd out of over 25 groups in the contest

FSAE Race Car Brake Pedal, Designer **2010**

- Designed an aluminum brake pedal in SolidWorks and produced a CNC'd product to replace the existing stainless steel pedal

ACTIVITIES

Intramural basketball • golf • mountain biking • FSAE race team • reading • volunteering