Bibissara Boranbayeva

Mechanical Engineering

ACADEMIC & CO-OP STATUS

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| **Academic Program** | * 5 of 8 academic terms completed * Anticipated date of graduation: May, 2020 |

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| **Co-op Status** | * Completed 4/5 work terms; available for 8 months beginning May, 2018 |

WORK EXPERIENCE

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| **Stryker Corporation – Burnaby, Canada**  ***Product Engineering Co-op Student***  **Medical Technologies** | **September, 2017 – Current** |

* Provided production support: problem-solving, corrective actions, change orders conducted in context with Stryker’s Standard Operating Procedures
* Designed test setups and testing conditions using Solidworks to investigate options for improving medical device performance used in Endoscopy
* Carried out testing on medical carts to satisfy EC60601 standards as well as support for certification per UL, CE and RoHS standards
* Participated in front-end conceptual design and engineering activities on future generation of medical carts
* Contributed to the teamwork on development of new requirement-specifications for new products
* Assisted in the design of production jigs and fixtures and supported production transfer including BOMs, assembly & procedures

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| **Robert Bosch GmbH – Stuttgart, Germany**  ***Engineering Intern***  **Automotive Electronics** | **January, 2017 – August, 2017** |

* Supported product engineering team working on development and research of the inertial rate sensors used in safety features of a car (e.g., air bag and electronic stability control unit)
* Performed precise measurement of the sensors, analysis of results using MATLAB and Excel, characterization and qualification of the product
* Assisted with project organization, categorization and storage of MEMS

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| **Consumer Electronics** |

* Worked in a team of engineers from different fields on development of laser-optical sensors that were used in air quality monitor devices as well as distance measurement devices
* Performed measurements of the sensors, trimming of the laser and analysis of the data using MATLAB
* Designed necessary measurement set-ups using Solidworks which helped to conclude the characterization report of the sensors for customers
* Completed the robustness test and reports which summarized the results of these tests that forwarded to further improvements of the product

TECHNICAL PROJECTS

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| **Medical UAV for Rwanda** | **September, 2016 – December, 2016** |

* Designed an unmanned aerial vehicle that improves access to life-saving medical testing for Rwandans in remote areas
* Contributed to detailed design of pulse jet, fueling system, on-board power generation and ascender system
* Successfully accomplished the project by meeting most of the needs and requirements of the customer
* Documented and prepared a well-written report and presentation summarizing the final design of UAV

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| **Fireboat Team Project** | **March, 2016 – April, 2016** |

* Designed and built fast, easy-to-maneuver and RC controlled fireboat model 80% of which is made of sustainable material
* Assembled the device and tested it under minimal supervision and guidance
* Demonstrated the boat and presented its proper work and functionality

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| **Regenerator Team Project** | **January, 2016 – February, 2016** |

* Scored as a 2nd highest team when competing with other mechanical students’ teams (20 teams in total)
* Designed and built vehicle with regenerative braking system using spring system as an energy storage
* Assembled the device and tested it under minimal supervision and guidance
* Demonstrated and presented the proper work and functionality of the vehicle and prepared a well-written report and presentation about the vehicle

VOLUNTEER WORK EXPERIENCE

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| **Green Chair Recycling**  ***James Cunningham Race Volunteer*** | **September, 2017** |

* Supported in supervising the recycling stations during the event, educating the public on recycling behavior and sorting and weighing the recyclables afterwards

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| **Columbia College**  ***Student Volunteer*** | **September, 2014 – August, 2015** |

* Greeted, advised and guided new international students and helped students to adopt in a new country culture and college environment
* Assisted student services coordinator of the college during the Orientation Week and improved my counselling skills

EDUCATION

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| **University of British Columbia**  ***Bachelor of Applied Science – Mechanical Engineering*** | **September, 2015 – Current** |
| **Columbia College**  ***University Transfer – Engineering*** | **September, 2014 – August, 2015** |

PROFESSIONAL AFFILIATIONS

**APEGBC**

LANGUAGE PROFICIENCY

* English – Proficient
* Russian – Proficient
* Kazakh – Native
* German - Beginner

ACTIVITIES AND INTERESTS

* Snowboarding, River Rafting and Kayaking
* Photography and Cinematography