

# R I A B A N E R J E E

## M E C H A T R O N I C S   E N G I N E E R I N G

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### LANGUAGES & TOOLS

- Java and JSP
- JavaScript
- CSS and HTML
- C++ and C
- Meteor.js and MongoDB
- Swift
- Git
- Matlab
- JIRA
- Eclipse
- Command Line
- Microsoft Office Suite

### SKILLS

- Web Interface software
- Regression Testing
- Troubleshooting and Debugging
- DevOps/Agile Methodologies
- Object-Oriented Programming
- iOS Development
- Algorithm Analysis (BigO)
- Web Development
- Development on Content Management Systems
- Salesforce
- Photoshop/Illustrator
- Automation and Streamlining

### EDUCATION

- Candidate for Bachelor of Applied Science in Honours Mechatronics Engineering  
September 2015 – Present
- Bridging Entrepreneurs to Students (BETS) Program  
April 2016 – September 2016

### ACHIEVEMENTS

- President's Scholarship of Distinction
- Graduated Magna Cum Laude from the International Baccalaureate program

### ENGINEERING EXPERIENCE

#### IBM Canada - Software Developer

September 2017 - December 2017

- Worked on backend and client-side services for IBM's in-house SIEM product, QRadar using Java, JSP and JS
- Researched and configured test cases for new prototypes to determine if they are compatible and feasible for implementation into existing products
- Leveraged version control, issue tracking, code review and continuous integration principles and toolsets to ensure all bugs and new features are implemented for each scheduled release

#### Manulife Financial - Software Engineer

August 2016 - September 2016

- Developed efficient and reusable front-end user interfaces using HTML/CSS/JS
- Built a functioning web application prototype to host a Project Management tool for a DevOps environment, using Meteor.js and MongoDB
- Showcased creative problem solving skills and developed excellent troubleshooting/debugging skills
- Gained extensive knowledge in product management/planning by conducting 20+ interviews with stakeholders for feature development

#### Arkana Arts - Automation Engineer

August 2016 - September 2016

- Automated processes to authenticate and authorize users, as well as sync posts to company platform as a part of an agile team
- Tested well-designed, reusable scripts using Python, AppleScript, and emulator macros
- Designed, developed and managed test cases for integration and regression testing of automation software

#### Advect Inc. - Systems Engineer

June 2016 - August 2016

- Configured a Raspberry Pi to kiosk mode through Command Line, and updated the front-end interface using HTML/CSS/JS
- Utilized Git for version control of iOS Application to fix numerous bugs in existing code
- Designed the UX/UI for the App through a process of user testing, and A/B versioning
- Analyzed test results, identified issues and reported it to developers and project managers through JIRA

### PROJECTS

#### Line Following Robot

August 2016

- Programmed (C) a robot to autonomously run motors & encoders based on sensor input
- Designed and soldered complete circuit board including photo sensors, motors and microprocessor

#### Real-Time Snake Game

August 2017

- Designed and developed (C) a real-time snake game on a MCB1700 Board leveraging low level embedded concepts such as multithreading, synchronization, interrupts and memory allocation
- Debugged and optimized efficiency of code by implementing various test scenarios

#### EKHO - The Texting Droid

April 2016

- Designed and programmed (C++) a robot to run motors & encoders based on sensor input to navigate through applications on a smartphone and perform various functions