# JORDAN HEINRICHS

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## Skills

- Competent and experienced programming using C++, C, Javascript, and Ruby
- Experienced with SQL, MongoDB, Python, Perl, and CSS
- Database management with MongoDB, MSSQL, and PostgreSQL
- Front-end experience with Vue, Angular 2, and Angular JS
- Back-end experience with Node.js with Express, C++ CGIs, and RESTful APIs
- Strong problem solving and troubleshooting skills
- Uses Agile development practices including TDD and Domain Driven Design
- Hard-working, motivated, and a team-player
- Enjoy challenges, learning, and problem solving
- Talented and passionate for electrical and software engineering fields

## Work Experience

### Arterys, Inc., Calgary

June 2018 - Present

Software Developer

- Full stack developer on a cloud based medical imaging application
- Developed web application with AngularJS and Vue
- Back-end development with C++, Node.js, and MongoDB
- Deployed and managed clusters on the AWS ecosystem
- Added and maintained features for 3D image rendering

#### Hitachi ID Systems, Inc., Calgary

May 2016 - June 2018

Intermediate Software Developer

- Enhanced an ID/access management software used in large organizations
- Improved the product's front-end web interface with jQuery and Angular 2 with Typescript
- Back-end development with C++ and MSSQL Server
- Maintained integration tests with Ruby and Watir
- Windows development and testing environment with Git and Cygwin

#### Lockheed Martin CDL Systems Ltd., Calgary

May 2014 - Aug 2015

Software Developer Intern

- Worked on software to interface between two protocols for UAV flight control
- Used Test Driven Development and other Agile methodologies
- Gained experience with C++ with QT, Perl, and Git
- Learned and implemented Domain Driven Design
- Developed for Windows, Linux, and Linux on ARM

#### NSERC Research, University of Calgary

May 2013 - Aug 2013

Summer Research Student

- Developed and executed tests to determine accuracy of a hexacopter dropping sensor nodes
- Troubleshooted and solved problems with the hexacopter which were preventing operation of the UAV and execution of the tests
- Created a program to capture position of the hexacopter using video tracking with C++ OpenCV
- Analysis of data using Matlab and C++ for the efficiency of sensor deployment
- Presented results and data in meetings and reports

## Education

### BSc, Electrical Engineering, minor in Computer Engineering 2011-2016

- University of Calgary
- GPA: 3.9/4.0 cumulative
- Notable courses:
  - Computer Graphics Introduction (CPSC 453)
  - Database Management Systems (CPSC 471)
  - Principles of Software Development (ENSF 409)

## Extracurricular Activities

#### University of Calgary Solar Car Electrical Team

Sept 2013 - Jan 2016

- Created telemetry protocol to communicate over XBee radios
- Used C++ with QT framework
- Worked on embedded system for driver controls
- Interfaced with multiple systems over CAN, UART, and SPI
- Experienced with prototyping circuits and soldering
- Lead software developer, mentored newer members
- Team projects are located here:
  - www.github.com/UCSolarCarTeam

## **Hobbies**

- Endurance athlete, trail, and road running
  - 2019 Boston Marathon finisher in 2:53:07
  - 60 km Iron Legs winner
  - Completed my first race over 100 km at the 2019 Golden Ultra
- Ski mountaineering, scrambling, and mountaineering
  - Summitted Cotopaxi Volcano (5897 m) in Ecuador
  - Skied Kitchener and Snow Dome. 9th and 10th tallest mountain in Alberta