# Krisztian Kurucz

3A Mechatronics Engineering

### Contact

# Education

#### **PERMANENT**

6 Weekes Avenue Richmond Hill, ON Canada

#### **TEMPORARY**

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in/krisztiankurucz in jazzkr 🞧

## Languages

English Hungarian

# Programming

Java, C++, C# Python HTML & CSS JavaScript, Node.js PHP & SQL VHDL & Verilog PLC Programming Embedded C MATLAB Assembly

## Hardware

Xilinx & Altera FPGAs Arduino ARM Cortex PIC

#### Software

AutoCAD Solidworks EagleCAD Cadence PADS Xilinx Vivado Altera Quartus Microsoft Office Candidate for Bachelor of Applied Science (BASc) in Mechatronics Engineering

University of Waterloo, Waterloo, ON

Expected 2018

Toronto, Ontario

Relevant Courses: Algorithms and Data Structures, Intro to Microprocessors and Digital Logic, Computer Structures and Real-Time Systems, Sensors and Instrumentation, Microprocessor Systems and Interfacing, and Actuators and Power Electronics

Ontario Secondary School Diploma (OSSD)

King City Secondary School, King City, ON 2013

# **Experience**

#### **Full Time**

#### **IMAGINE COMMUNICATIONS**

Hardware Designer January 2016 - April 2016

 Assisted with VHDL design and simulation for Xilinx-based FPGAs centered around real-time audio and video processing

- Revised and updated electrical schematics with Cadence EDA tools to replace an IC on an existing production board, then tested and verified the successful redesign
- Analyzed and debugged a defective board through examining the schematic, probing using a multimeter and oscilloscope, and logical circuit troubleshooting
- Conducted SFP+ compliance testing to ensure signal integrity on pre-production boards, as well as wrote the associated formal compliance reports

#### **KEPSTRUM INC**

Junior Engineer

Vaughan, Ontario May 2015 - August 2015

Waterloo, Ontario

- Led development of a major Windows application in C#, meant to facilitate internal engineering processes, completing a working prototype in less than two months
- Contributed to software and PLC test stand HMI development on-site at Kepstrum's technical facilities in Austria
- Initiated changes to existing business practices through the introduction of a formal revision control system as well as a centralized knowledge-base for the company

BLACKBERRY LTD

Software Systems Analyst

September 2014 - December 2014

- Administrated and supported employees on different systems such as JIRA, Git, Perforce, Integrity, and other proprietary internal tools
- Took ownership of the development of an existing BlackBerry 10 app in C++, improving and updating it for newer versions of the OS through fixing bugs and introducing new features that capitalized on the capabilities of newer devices
- Developed an internal Android app to fill an existing need within the company, successfully learning Android development basics in parallel to regular duties of the job

#### UNIVERSITY OF WATERLOO INFORMATION SYSTEMS AND TECHNOLOGY

Junior Technical Support Specialist

Waterloo, Ontario January 2014 - April 2014

- Provided front-line technical support and services to the university community
- Solved a wide variety of technical problems using logical troubleshooting methodology
- Continually offered exceptional customer service to the student and staff community, and was specifically recognized for this within the organization through client feedback
- Developed a wireless testing tool in C++, aimed at providing diagnostic information about the wireless internet strength at various locations around the university

#### Part Time

#### UNIVERSITY OF WATERLOO INFORMATION SYSTEMS AND TECHNOLOGY

Waterloo, Ontario

Student Computing Consultant

April 2014 - April 2015

 Worked part-time during school in the same capacity as a Junior Technical Support Specialist, providing front-line technical support and services to the university community during off-peak hours

## **Awards**

#### WatPD Engineering Entrance Scholarship

University of Waterloo, Waterloo, ON

Received for academic and extracurricular excellence

September 2013

Governor General's Academic Bronze Medal

King City Secondary School, King City, ON

Received for achieving the highest average upon graduation

June 2013

# **Personal Projects**

#### **Electronics and Hardware Prototyping**

2013 - Present

- · Explored and learned valuable electronics skills such as soldering, circuit troubleshooting, electrical CAD, and home PCB etching through a variety of small Arduino-based projects
- Designed and prototyped practical circuits such as an AUX-to-Bluetooth module for my car, a variable power supply for future projects, and addressable LED string lights for room decoration
- · Gained experience in designing and assembling mechanical systems through construction of a 3D printer, custom wooden rack, and other project enclosures

#### Self-Guided Programming and Software Systems Projects

- Designed and created my personal website, www.krisztiankurucz.ca, learning HTML, CSS, and Javascript as necessary to craft a modern user experience
- · Wrote plugins for a popular Java-based game, one of which became popular and was downloaded over 1000 times by the community
- · Managed and administered the backend to my website by setting up, configuring, and securing all necessary packages and services on a virtual private server running Ubuntu

#### **Engineering Orientation Leader**

September 2014 & September 2015

- Organized and supervised incoming first-year students, ensuring they were engaged and having fun during orientation week activities
- Took responsibility for an entire colour group of over 80 students, with the help of only two other orientation leaders

## Interests

professional: data analysis, electronic design, app creation, web design, programming, wood-

personal: cooking, running, snowboarding, reading, photography

References Available upon request.