Phone: 1 (519)-497-9391 Email: jiasenxu@gmail.com

LinkedIn: www.linkedin.com/in/jiasenxu

Education

University of Waterloo Waterloo, Canada

Master of Applied Science in Electrical & Computer Engineering (GPA: 94.4/100)

2014 - Present

Jiasen XU

- Full Tuition Scholarship granted for 2 years. Faculty of Engineering Award winner
- Thesis: Quantizer Design in High Efficiency Video Compression (HEVC)

University of Science and Technology of China

Hefei, China

Bachelor of Engineering in Electrical Engineering (GPA: 91.0/100)

2010 - 2014

- Directly admitted without National College Entrance Exam through National Physics Olympiad
- National Scholarship recipient. Ranked 10/311 in School of Information Technology

Highlight of Skills

- **Programming:** Solid knowledge of algorithm and data structures; Highly proficient in Matlab and C, Proficient in C++ and also familiar with Java, Ruby and shell scripting; Contributed to 100K+ lines open source project and 4K+ lines individual project; Started programming since 11 years old
- Web Development: Proficient in web development with Ruby on Rails, HTML, CSS and Javascript; Also familiar with JavaEE with JSP, Servlets and JDBC. Hands-on experience in more than 3 real-world projects
- Database System: Highly proficient in SQL; Hands-on experience in both Relational and NoSQL databases
- Development Tools: Familiar with Visual Studio, MATLAB, Unix like OS, vim editor, Git/Github and Netbeans
- Research: 3 years' research experience in data compression, image processing and information theory; Expert in JPEG compression standard; In-depth understanding of HEVC/H.265 video compression standard

Experience

Software Developer (Part time)

Kitchener, Canada

ApplyBoard Inc., a Startup Incubated in Velocity Garage

Jul. 2015 - Present

- ApplyBoard is an online application platform for students anywhere in the world to find the best university or college in Canada or the U.S. and apply to it. https://www.applyboard.com
- Actively contributing to the main app as a **full-stack** developer (205 commits with 10,035 LOC to date)
- In charge of testing automation, Search Engine Optimization (SEO), database migration and management
- Researching into a significant amount of open source web techniques to perfect the main web application
- Having 50K+ active users globally with 400K+ visits to date; there have been 200+ students successfully getting accepted to colleges/universities in Canada or the U.S. with the help of our web application

Research Assistant

Waterloo, Canada

University of Waterloo, Canada

Con 2011 Present

University of Waterloo, Supervised by Professor En-Hui Yang

Sep. 2014 - Present

- Redesign the quantizer in HEVC/H.265 to further improve video compression performance. Methodology is based on video content understanding using machine learning and statistical analysis tools
- Made contribution to the HEVC test Module (HM16.5), an open source project with 100K+ lines of C++ code

Notable Projects

Hybrid Database Based E-Commerce Web Application

 $Group\ leader.\ Advanced\ Database\ Systems\ course\ project$

Jan. 2015 - May. 2015

- An E-Commerce JavaEE application with backend connecting with MySQL and MongoDB simultaneously
- Lead the project development, framework setup, backend coding, database schema design and UI/UX design
- In charge of sprint planning, task distribution, and tutorials for new techniques adopted

JPEG Image Decoder

Individual side project

Jan. 2015 - Jun. 2015

- Individually developed a console application that are able to decode nearly all JPEG images within a second
- Application can handle the prevalent Baseline/Progressive encoded images; multi-resolution displaying for Progressive encoded images is also provided