

SUMMARY OF SKILLS

- Solid programming skills in **C/C++** honed from three years' project and work experience
- Two years' working knowledge of **PHP, HTML, CSS, JavaScript, MySQL and Python**
- Proficient in **Object Oriented Programming** using **Visual Studio** or in **Linux**
- Advanced knowledge in **TCP/IP architecture** and project experience in **network programming**
- Strong background in **algorithms, mathematics** and **computer vision**
- Four years' experience in using **Linux** (including **ArchLinux, CentOS** and **Ubuntu**)
- Outstanding planner, quick-learner and team player

TECHNICAL WORK EXPERIENCE

Research Assistant Jan. 2015– Present

Computational Logic Lab, SFU (Canada) with Prof. Oliver Schulte

- Implemented web crawler in Python to crawl data from NHL official website and analyzed manpower differential on the fly.
- Built regression tree for classifying data using machine learning algorithm built in *Weka*
- Analyzed 11GiB data in MySQL database and plot interesting data sets using MATLAB script

Full Stack Web Developer Aug. – Sep. 2014

Ninghai Xiangyu Stationery Co., Ltd., P.R. China

- Designed and built an online management system using PHP and MySQL as back-end to support sales management, inventory management and etc. Different privileges are granted to each employee
- Developed a PDF export function using open source library TCPDF which enables users to dynamically download generated PDF documents
- Applied HTTPS and HSTS to ensure account security and use PDO to avoid SQL injection

Frontend Developer Jul. – Aug. 2014

Ningbo Wanlyan Child Product Co., Ltd., P.R. China

- Designed and built fancy website using web frame Bootstrap 3 to display introduction and products
- Polished the website using CSS3 and jQuery to make it more attractive
- Wrote specialized CSS for small screens (smart phone) to make the website responsive

EDUCATION BACKGROUND

Simon Fraser University, Bachelor of Science in Computing Science 2014 - Present

- Overall GPA: 4.12 / 4.33 (A: 4.0)
- Minor: Mathematics

Zhejiang University, Bachelor of Engineering in Computer Science and Technology 2012 - Present

- Overall GPA: 3.9 / 4.0 (A: 4.0)
- Top 2% in Zhejiang University

SELECTED TECHNICAL PROJECTS

Real Time Gesture Recognition

Mar. – Apr. 2015

Computer Vision, Simon Fraser University [code: https://github.com/zeruniverse/Gesture_Recognition]

- Implement real time hand gesture recognition using C++ and MFC which takes photo from camera and recognize user's gesture (Rock/Paper/Scissor)
- Find face region using Haar-like transform to build skin color model
- Find finger gaps by recognizing convexity defects and then find fingertips by local features

Password Manager

Jan. 2015

Personal project [project link: pw.zzeyu.com]

- Generated different strong passwords for different accounts, and saved these passwords in a server after encryption which will greatly improve account security
- Applied SHA512 (with salt) to generate password signature and only transfer this signature to server, which makes sure no one knows the password except the user
- Programmed AES-256 algorithm in JavaScript with CryptoJS library and used HTML5 Session Storage feature to implement client-side encryption and decryption

Sensor Network

Jul. 2014

Project Training, Zhejiang University

- Aimed at gathering data such as temperature, PM2.5 from multiple places on campus and display those data on webpage in real-time from sensors which will be linked to Arduino
- Built an embedded program on Arduino using C to get data from sensors
- Designed wireless communication protocol to let Arduino work at places without wired Internet access

COMMUNITY INVOLVEMENT

Technical Specialist

Sep. 2012 - Jun. 2013

Student Union of Zhejiang University, Academic & Culture Department

- Designed posters with Photoshop, made videos with After Effects and organized some activities
- Awarded as one of the Star Members in 2013 in recognition of campus engagement

AWARDS / SCHOLARSHIPS

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| ● 5 th Place in SFU Winter Programming Contest | 2015 |
| ● National Scholarship of P.R.China (Top 2% in Zhejiang University) | 2014 |
| ● Simon Fraser University Dual-Degree-Program Entrance Scholarship, First class | 2014 |
| ● 14 th Place in Zhejiang University Mathematical Modeling contest | 2014 |
| ● 17 th Place in ACM/ICPC North America Pacific Region | 2014 |
| ● Zhejiang University Academic Excellence Scholarship, First-class | 2013 & 2014 |
| ● Zhejiang University Excellent Student Leader Award | 2013 |
| ● 2 nd Prize in University Mathematic Contest of Zhejiang Province | 2013 |