

WORK EXPERIENCE

Full Stack Developer | GUI Team Lead

Fortinet Technologies | Burnaby, BC

Mar 2017 – Feb 2018(To be)

- Managed and updated APIs over web services and customized socket protocol in order to enrich features and usage including RESTful API, high availability, remote authentication proxy, accounting daemon and other Fortinet products.
- Managed and coordinated GUI team for Fortinet signature product with increasing quarter sales of millions USD
- Provided direct feedback to Sr. Director of software development and Sr. product managers with respect to feasibility, alternative solutions, realization estimation and implementation progress & reports for ongoing development cycle
- Prioritized and implemented new features according to roadmap. Estimated and distributed development tasks within frontend team
- Took ownership of legacy products & features and converted them to loose coupling services in seek of scalability and performance increase whilst maintaining stability and customizability
- Verified pre-release tasks routinely such as migration compression, extending GA release list and ensure failover in HA mode.
- Conducted researches routinely and proposed changes between development cycles with respect to functionality, performance, security and UX
- Was solely responsible for entire GUI project for 6+ months due to absence of previous lead.
- Updated screening and onsite tests, attended 20+ interviews to provide technical evaluation for multiple teams, offered onboard training to new hires to mitigate transitioning cost & time
- Catered technical insights and presentation for SEs, Ops, Sales and support team about new features to align understandings in order to ensure smooth delivery of our products and services
- Reviewed and patched code base for security flaws such as hard-coded credentials, potential injections, and buffer overflow in order to certify by ISO 27001 and PCI compliance

Junior Web Developer

Fortinet Technologies | Burnaby, BC

Jan 2016 – Mar 2017

Software Engineer, Intern

Microsoft Canada | Vancouver, BC

May 2015 - Sep 2015

- Assisted on migrating millions of Xbox users' records from relational database to Azure NoSQL storage so as to greatly reduce storage costs
- Developed toolkits for internal development usage to greatly simplify query operations and entries manipulation in NoSQL environment
- Designed and implemented service module to identify key patterns of NFL game plays based on data stream feed from NFL, ESPN service in order to automatically generate replays on spectacular moments such as touchdowns and long passes
- Investigated and automated APIs tests for token-based authentication on Win10 and Xbox

Mobile Application Quality Analyst, Intern

Global Relay, Inc. | Vancouver, BC

Jan 2015 - May 2015

EDUCATION

Bachelor of Computing Science with Dual Concentrations

Simon Fraser University | Burnaby, BC

Jan 2013 - Dec 2015

PROJECT EXPERIENCE

Push Notification Based Two Factor Authentication Daemon

Fortinet Technologies(CA) ULC

Apr 2016 – Present

- Implemented RESTful APIs to extend legacy OTP based 2FA feature which greatly reduced the amount of efforts required to integrate with new products
- Refactored and encapsulated underlying logic of push notification into a shared library to reduce complex dependencies and boost performance
- Introduced extra AES256 CBC encryption on top of TLS to increase security of data in transmission and data in third party delivery server
- Rewrote delivery features into daemon and added socket interface to grant access to other services such as RADIUS and OpenLDAP
- Setup, patched and maintained test servers in development environment to ensure accessibility for other teams that develop products relying on this feature
- Provided consultation on security concerns and implementation details to mobile team in US during the development of client applications

Live Stream NFL Game Data Scrubbing Service

Microsoft | Vancouver

Jul 2015 - Aug 2015

- Developed services to clean & extract data from cameras and sensors in live football games streamed by NFL and ESPN in order to send consumable data for other services to process
- Designed and implemented algorithms to identify outstanding moments from data flow with principles of strict time constraints and best-effort results delivery
- Streamed filtered data to other services for real-time playbacks whilst store it NoSQL Azure Table Storage for archiving purpose
- Implemented algorithms with anonymous functions in DLL to allow redefine filtering condition on the fly with configuration file
- Proposed new design using online algorithm to leverage time restriction and gain scalability

HONOURS & AWARDS

Open scholarship

Simon Fraser University | Burnaby, BC

May 2014

Entrance Scholarship

Simon Fraser University | Burnaby, BC

Jan 2013

Highest Academic Achievement of Computer Science

Fraser International College | Burnaby, BC

Dec 2012

INTERESTS & HOBBIES

Programming, Fishing, Sake, Hackathon, Reading, Container Gardens, Gaming

TECHNICAL HIGHLIGHTS

Programming Languages

- Python, JavaScript, Sh
- C, C++, Objective-C, C#, Java, Swift, SQL

Security

- AES 128/256 Encryption
- LDAP, RADIUS, Windows AD, OTP based 2FA
- OpenSSL, Certificate Authority
- PKI, SCEP, CMP, IEEE802.1X
- Session-based and Token-based Authentication E.g. Session middleware, JWT,
- Password management policies e.g. expiry enforcement, complexity checking
- CSRF, XSS, SQL/shell injection, MITM prevention
- Buffer overflow attack

Frontend Dev& Software Developer Skillset

- Django, Flask, Grails, Node.js
- jQuery, Bootstrap, AngularJS, Ext, HTML5/CSS3, Vue
- MVC, Multi-tier architecture, RESTful, SOAP, AJAX
- iOS app released to Apple store
- Notification services like APNS, GCM and FCM
- Cocoa Pod, AF Networking, Google Map SDK, Baidu Map SDK
- Open-CV, PIL, Cocoa CoreGraphic, RevealApp, UberTester, TestFlight

DevOp& System Admin Skillset

- Cloud hosting E.g. AWS, Google Cloud Platform, Azure
- Apache2, Tomcat
- curl, httpie, Wireshark, Fiddler, Postman
- SSH/SFTP, mod_wsgi, CGI, HTTP(S)/2, TCP/UDP/IP, RDP
- Windows XP+, Mac OS 10.8+, Ubuntu Desktop12.04+, Ubuntu Server 14.04

Backend Dev& Database Admin Skillset

- Linux basic tools such as cronjob, initd, pipe, signal
- Socket programming, load balancing, HA
- Message/Tasks queue. Multi-threading and Asynchronizing programming (2PL or lock-free)
- PostgreSQL, pgAdmin, MS SQL Server, MySQL Server & WorkBench, SQLite3, Azure SQL/Table Storage, Cassandra
- Python MySQL Connector, Django RESTful framework, Newton json.NET, Tasty-Pie, HQL+GROM
- Xcode, Jet Brains series, Visual Studio, Android Studio, Eclipse, Cascades, Unity