Roman Geluz

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OBJECTIVE

To obtain a Software Developer position in an innovated work environment, where I would have the opportunity to utilize the skills, experience and knowledge I have acquired in my education and professional experience, to gain additional technical knowledge and deliver value added results to the organization.

EDUCATION

University of California, Irvine **Irvine, CA**

Donald Bren School of Information and Computer Sciences

B.S., Software Engineering Expected: Spring 2020

- **Relevant Courses completed:** Java, C++, C, Data Structures, Assembly Language, Computer Architecture, Calculus I, Calculus II, Discrete Mathematics, Linear Algebra, Boolean Algebra and Discrete Structures, Intro to Software Engineering, Software Design: Applications, Probability & Statistics, Human Computer Interaction, Requirements Analysis, Intro to Data Management, Computer Networks and Analysis of Algorithms (to name a few).
- **Relevant Courses in progress:** Project Management, Software Testing & Quality Assurance, and User Interaction Software. **Relevant Courses to be scheduled:** Principles of Operating Systems, Concepts in Programming Languages, Software Design: Structure and Implementation, Internet Applications Engineering (to name a few).
- *Dean's Honor List (Fall 2018 and Winter 2018 Quarters).*
- Second Bachelors Program.

San Diego State University **San Diego, CA**

Fowler College of Business

B.S., Business Administration, Major in Information Systems May 2009

- *Distinction in the Major.*
- *Dean's List Semester Honors.*
- Member of Association of Information Technology Professionals (AITP) SDSU Chapter – Executive Assistant.

SKILL SUMMARY

- **GitHub: https://github.com/rgeluz**
- **Programming Languages:** Java, Groovy, C#, C++, Python, R, Assembly (MIPS), Assembly (M68000), Visual Basic .NET, Hibernate, Hive, PL/SQL and T-SQL, SQL and SQL++.
- **Web Languages:** Academic knowledge in HTML5, CSS3, Bootstrap4, JavaScript, and jQuery. Currently learning ReactJS (Udemy) and Swift/iOS development (Udemy).
- **Servers:** Apache Tomcat, Apache Felix, Apache Karaf, Hadoop.
- **Integrated Development Environments/Editors:** Intellij IDEA, Eclipse, Netbeans, Aptana Studio, Visual Studio, Visual Studio Code, Atom, Xcode, Sublime Text and Notepad++.
- **Databases:** Database Logical and Physical Design, MySQL, PostgreSQL, MS SQL Server 2005/2008, SQLite, Oracle 11g and AsterixDB (NoSQL).
- **Database Management Tools:** MySQL Workbench, PgAdmin, SQL Server Management Studio, SQLite2009 Pro, Toad for Oracle, and SQL Developer.
- **Revision Control:** Git, GitHub, Perforce, CS-RCS, Subversion, TortoiseGit and TortoiseSVN.
- **Other Software:** Selenium WebDriver, Spock Framework, NUnit (C#), TestNG (Java), JUnit, Apache Ant, Maven, Artifactory, Nexus, Jenkins, VirtualBox, Wireshark, Postman, InstallShield, Jira, Confluence, Code Collaborator, Norton Ghost, Gimp, Snagit and Camtasia.
- **Platforms:** Windows XP, 7, 10, Server 2008, Linux and UNIX.

PROFESSIONAL EXPERIENCE

Software Engineer Intern
June 2019 to September 2019

Dassault Systemes - Biovia
San Diego, CA

Intern for the Foundation Hub software development team. Foundation Hub is a **client-server web application** used by customers of Biovia, to help manage lab task and equipment for R&D.

- Reinstated **CSV import/export** functionality, previously developed but not yet released into production. At the time, Hub provided a **REST API** to export and import data files in **JSON format**, between instances of Foundation Hub.
- Used **Spock Framework** to create several **Functional Test**, written in **Groovy**, to test and verify the **CSV import/export** functionality meets requirements. Resolved failures with code fix.
- Tasked to create a new **REST API** feature using a custom odata option called "$reference". The user would perform a get method using the $reference parameter and provide a json object in the payload. The response was a json object containing related nested objects.
- **Development Environment: Agile Environment, Jira, IntelliJ, Groovy, Spock, Postman, Perforce and Code Collaborator.**

Software Engineer
December 2015 to July 2016

Forward Slope Inc.
San Diego, CA

Evaluated, researched and developed possible system enhancements to Client's existing system.

- Worked on the CAMEO/RIC Project led by Space and Naval Warfare Systems Command (SPAWAR).
- The Comprehensive Automated Maintenance Environment Optimized (CAMEO) and Readiness Integration Center (RIC) project provided support for the V-22 Osprey Tilt Rotor Aircraft. I worked with a team of software engineer contractors to research and design possible system enhancements to the current CAMEO/RIC system:
- Developed a prototype "JDBC to Postgres" module and "JDBC to Hive" module written in **Java**, for potential data migration from a **Postgres RDBMS** to **Hive** on **Hadoop platform**.
- Researched and prototyped various **OSGi technologies** (written in Java) for potential use in packaging existing code into reusable components. **OSGi frameworks** included **Apache Felix, Apache Karaf and Apache Service Mix.**
- **SPAWAR's task repository: Bugzilla, and code repository: Subversion**.

LIMS Programmer
December 2013 to October 2015

AltheaDx
San Diego, CA

Primary developer/administrator for the Company's Laboratory Information Management System.

- Performed **LIMS** system administration and feature development/deployment.
- Developed new features written in **Java**. Completed several successful major and minor releases of their **LIMS** system.
- Perform bug fixes and troubleshooting. Bugs and Features were tracked using **JIRA**.
- Codebase was maintained through **GitHub** account.

IT Analyst (Contractor)
June 2013 to December 2013

Solar Turbines Inc.
San Diego, CA

Tasked to optimized engineering department's report generation.

- Contracted for a six-month project to improve the reporting performance of their Engineering department's electrical cad software (Promis-e), used by the electrical and mechanical engineering staff. Completed assignment in less than half the contracted time (three months).
- The project involved reducing the length of time to produce schematic reports generated by Promis-e. Processing time was reduced, by optimizing the **sql views** used by the application's reporting code.

Software Technical Assistant December 2009 to June 2013
Celula Inc. San Diego, CA

Assistant to Senior Software Engineers. Performed various task assigned.

- Assisted Senior Developers in development and testing of the Celula Laboratory Information Systems (CLIMS). The system is an in-house web application. The front-end is an Adobe Flex client and the **back-end** is a **Java, Hibernate and SQL technology stack**.
- Helped write backend code which is written in **Java.**
- Deployed system onto test environment using a **custom ant script.**
- Performed **unit testing** and **black-box testing.**
- Black-box tester of control software for a proprietary Cell Sorting Flow Cytometer called the mvs360. Helped create User Manual for the mvs360.

SCHOOL PROJECTS

Portfolio Website (INF 133 User Interaction Software. October 2019)

- Created a Responsive Portfolio website from scratch using HTML5, CSS3 and Bootstrap4.
- The website includes multiple pages that include course work, school and personal projects.
- The website utilizes a small amount of custom JavaScript to provide advance UI behavior.
- The website is responsive and passes validation and accessibility checks.

Design Studio III – Collaborative Math Learning (INF121 – Software Design: Applications. December 2018)

- The final of the three design studios for INF121, which involved applying all of the software designs concepts together into this project.
- Project involved designing a math learning application for a fictional educational software company. The company is interested in an app for kids (target age 5 to 9) to learn math using Amazon Alexa. The company is not versed in software design and is interested in the design process and would like to see detailed deliverables:
  - Application Design
  - Interaction Design
  - Architecture Design
  - Implementation Design
- Our team created several design deliverables for the "Math is Fun" app: Mind Map, Personas and Scenarios, Storyboards, High Level System Architecture Diagram, Data Warehouse Architecture Diagram, Data Schema, AWS Custom Skill (pseudo code), AWS Lambda Function (pseudo code).
- Most of the deliverables were Low Fidelity rough sketch prototypes and no actual implementation was provided.

Design Studio II – Traffic Light Simulator (INF121 – Software Design: Applications. November 2018)

- Design a traffic simulator for a fictional professor who teaches civil engineering. The app is to be used by her students to provide education of traffic signal timing and traffic outcome, through observation of using/exploring different traffic signal timing schemes on a user configured road map.
- Identified the project's audience, stakeholders, goals, constraints, assumptions, and functional/non-functional requirements.
- Designed UML Diagram, Traffic Light Phase Diagram and various Road/Intersection Diagrams.
- Determined Data Structure (Queue) to be used and Algorithm for changing of Traffic Light States and advancement of automobiles through intersections.
- Algorithm written in Pseudocode.

Design Studio I – Family Monitor (INF121 – Software Design: Applications. October 2018)

- Design an app to locate the whereabouts of one's family members (no implementation, just determining the functionality and design of interface).

- Identified the project's audience, stakeholders, goals, constraints, assumptions, and functional/non-functional requirements.
- Created sketches/wireframe of user interface.

Student Assistant System Requirements (INF43 – Intro to Software Engineering. October 2018)

- Created a requirements specification for a new system to be used by students, parents, staff and teachers of a fictional junior high. The system is to include new functionality, as well as consolidate all access to existing systems into a centralized system.
- The document includes sections on Executive Summary, Application Context, Environmental Constraints, Functional Requirements, Use Case Diagram, Software Qualities and Non-Functional Requirements, Other Requirements, Assumptions/Risks, Priorities/Implementation Phases and Future Directions and Expected Changes.

TCP Client Server Socket Programming (CS132 – Computer Networks).

- Created a simple HTTP server, written in Python, that handles one HTTP request at a time. The server accepts and parses the request and then creates a HTTP response and sends it back to the HTTP client.
- Created a simple HTTP client, written in Python, that can connect to the HTTP server using TCP connection, send an HTTP request (Get Method) to the server and display the server's response as output.

Implemented various Data Structures (CS331-Data Structures: Feb 2017-May 2017). All implementations were written in C++.

- Stack/Queue, Big O Notation, Quicksort, LinkedList, Binary Search Tree, Max Heap and Hashing.

Why are GPUs Better than CPUs for Bitcoin Mining (CS331-Computer Architecture. April 2018)

- Presented topic on Bitcoin and Bitcoin Mining. Explained why GPUs are better than CPUs for Bitcoin Mining (average much higher hash rates and cheaper than CPUs) and their architectural differences. Compared different hardware used for mining (CPU, GPU, FPGA, and ASIC).

Name Search (CISC192-C/C++ Programming: July 2017)

- Wrote a command line program that reads the contents of two files (GirlNames.txt and BoyNames.Txt) and indicates whether the name entered by the user, is among the most popular names in the United States during 2000 to 2009. Program written in C++.

Lottery Application (CISC190-Java Programming: July 2017)

- Wrote a command line program that simulates a lottery. User enters five digits, and the program matches the user's set of numbers with the winning numbers that is randomly generated. If digits match, a message is displayed proclaiming the user as a grand prize winner. Program written in Java.