Karl Parkinson

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Summary

- 16 months experience as a software developer writing production code primarily in Ruby, Java, and SQL.
- Won the Haemonetics Software Solutions Computing Science Scholarship and the Priscilla Hammond Memorial Prize in Junior English. Awarded by the University of Alberta departments of Computing Science and English respectively.
- Core Languages: Ruby, Python, Java, SQL

Education

University of Alberta Completion April 2016
BSc with Specialization Computing Science

- GPA: 3.65
- Excelled in courses that make up Computer Science fundamentals, such as Algorithms, Database Systems, Computer Architecture, and Operating Systems.

Work Experience

Software Development Intern **Invidi Technologies Corporation**
May 2014 – September 2015 Edmonton, AB

- Worked as a member of a scrum team developing an automated testing framework designed to ensure the Invidi Advatar platform performs correctly at scale. Primarily written in Ruby with a PostgreSQL backend.
- Wrote Ruby code which first simulates a daily load of SOAP calls made in a customer deployment, collates response time results, and then displays a report summarizing the performance of the system under test.
- Helped design and engineer a real-time data analysis and monitoring tool to diagnose the health of the Advatar platform. Built using Java, Apache Storm, and a SQL Server data warehouse. Primarily worked on writing SQL stored procedures in the data warehouse and developing JUnit tests to ensure correctness of code used to extract data from customer logs.

Summer Student **Government of Alberta**
May 2013 - September 2013 Edmonton, AB

- Working in the Government of Alberta datacenter, performed assigned maintenance tasks such as installing temperature probes, setting up data equipment racks, wiping hard drives, and disposing of old computers in accordance with government IT policies.
- Supported video conferencing infrastructure by troubleshooting technical issues with video conference users and installing AV equipment.

Personal Projects

Graphs

- Python project that exhibits how fundamental algorithms, such as depth-first search and Dijkstra's algorithm, operate on the graph data structure. Implemented a GUI and coded the algorithms.

wifiLock

- A wifi controlled deadbolt lock. Built using a Particle Core microcontroller and a servo motor. Designed and built a simple circuit and wrote the firmware powering the microcontroller.

Sparkby

- A Ruby library which wraps the Particle cloud API. Allows users to write Ruby code to interact with their Particle devices. Makes HTTP requests, handles authentication, and returns JSON responses.

ScrumBoard

- A simple Kanban style project management app. Developed from scratch on a stack consisting of Ruby on Rails, jQuery, and PostgreSQL. Designed and built the UI using HTML and CSS. Deployed to heroku.