

## PROFESSIONAL EXPERIENCE

### Gates Corporation

Software Engineer

Denver, CO

Summer 2015 - Present

- In charge of the development, testing, maintenance, and deployment of Design Power desktop application. Design Power consolidated various engineering applications into a Computer-Aided Engineering software suite for Gates engineers. The project was carried out through the use of .NET, C#, SQLite, WPF, and XAML
- Responsible for the implementation and system testing of Sidewinder ABDS physics model, Levenberg-Marquardt root finding algorithm, CAD functionality, and the design of the user interface
- Completed maintenance requests for ABDS, CVT, and CVT Tuner modules of the Design Power application. Requests involved interface fixes, optimization of calculations, and functionality enhancements
- Fulfilled a time sensitive requirement by sending a JSON GET request that helped secure a contract with Motion Industries
- Reworked Design Power's graphical user interface making WPF views user friendly by reorganizing cluttered information into easy to view layouts

### Fast Enterprises LLC

Implementation Consultant

Salem, OR

Summer 2014 - Summer 2015

- Guaranteed the reliability of the automated non-filer processing by performing rigorous unit testing of .NET subs, functions, and GenTax configuration
- Transformed GenTax users from novices to experts by instilling confidence in performing everyday tasks
- Simplified the job of the audit unit by writing complex, yet efficient SQL queries that were used to optimize the auditing process
- Reduced the time that it takes an auditor to complete their work by pre-populating the audit working papers with existing return information
- Lead new Fast hires on the path to becoming successful Implementation Consultants

### Laboratory of Atmospheric and Space Physics

Scientific Computing Intern

Boulder, CO

Spring 2013 - Spring 2014

- Reduced the insert time of SQL queries from 18 hours to minutes by statistically comparing the JDBC benchmark data set to that of the SQL\*Loader
- Ensured the proper execution and correctness of output produced by a Java class responsible for parsing telemetry data by implementing a Java test class
- Enhanced the documentation of the Hanning Filter routine by providing graphical representations of the data filtering process using IDL visualization tools
- Designed the software architecture and Java implementation of the Hanning Filter and used it to remove noise from raw telemetry data.

## EDUCATION

**University:** University of Colorado  
**School:** College of Engineering

**Degree:** B.S. in Applied Mathematics  
**Graduated:** May, 2014

**Minor:** Computer Science  
**GPA:** 3.41

## TECHNICAL KNOWLEDGE

Languages		Web	DB Tools	IDE	Version Control	Code Quality
C#	MATLAB	HTML	SQL Server	Visual Studio	TFS	Visual Studio Unit Test
Java	IDL	CSS	SQLite	Eclipse	Git	JUnit
.NET	C/C++	PHP	Oracle SQL	Emacs	Subversion	Jenkins