

David Grant

3151 2nd Ave. W.
Vancouver, BC
V6K 1K7

604-831-8171
davidgrant@gmail.com
www.davidgrant.ca

Intermediate Software Developer

Highlights of Qualifications

- Python: 7 years experience at school, home, and work.
- Java: 2 years work experience (last used in 2007).
- C#/.NET Framework 3.5: 1 year work experience.
- Highly proficient in Linux, having used it for past 10 years.

Software Development Experience

- **Kodak Graphic Communications Group** Burnaby, BC
Prinerger Software Developer *2007 - present*
 - Initially part of deployment team and then “Better, Cheaper, Faster” team. Both are cross-functional teams developing deployment tools, build tools, test automation, and other tools to make development and support better, cheaper, and faster.
 - Improved reliability of Python-based upgrade tool, minimizing support costs and test time.
 - Maintained and enhanced Python-based server migration tool. Reduced support costs.
 - Designed and developed remote reporting software in C#/.NET/Linq-To-SQL.
 - Initiated Python/Django application to view all Prinerger servers on network. Led to significant time savings for 50+ people.
 - Implemented Python/Django build system front-end, increasing developer productivity.
 - Co-designed and contributed to implementation of auto-testing framework in C#/.NET.
 - Started Python Club and led about 10 semi-weekly meetings.
 - Technical environment included: Vim, Visual Studio 2008, Eclipse+PyDEV, Perforce
- **D-Wave Systems** Burnaby, BC
Software Developer *2005 - 2007*
 - Built prototype web service for quantum computer using Groovy, then reimplemented it using Java/Spring/Hibernate stack.
 - Wrote core components involved in D-Wave Technology Demonstration (Feb. 2007) at the Computer History Museum, Mountain View, CA, including Python interface to quantum computer, and Java library to communicate with Python interface.
 - Integrated Matlab backend solver code with Java using JMatLink. Used test-driven development to speed up development and ensure code reliability.
 - Designed and led implementation of the first graph embedding algorithm for D-Wave’s quantum hardware using Matlab.
 - Increased developer productivity by creating Ant builds for projects that were previously being built in the IDE. Later converted many Java and C projects to use Maven instead.

- Initiated and championed a company-wide wiki using Mediawiki and a Subversion repository. Both are still in use today.
- Technical environment included: Linux, Vim, IDEA, Ant, Maven, CVS, Subversion, WingIDE

- **D-Wave Systems**

Vancouver, BC

- *Intellectual Property Scientific Officer*

2004 - 2005

- Initiated and developed the first Ising model simulator at D-Wave in Python and was then asked to join software team to do more simulation work.
- Improved efficiency in the IP department by writing some useful software utilities:
 - 1) Python screen-scraper to scrape information on D-Wave's pending patents from US Patent Office's website and present it in clear report.
 - 2) Python program to check for antecedent basis in patent claims.
- Drafted patents and wrote technical responses to office actions from USPTO.

- **D-Wave Systems**

Vancouver, BC

- *Junior Research Scientist NSERC Internship*

May 2002 - Aug. 2002

- Added new algorithms such as quantum Fourier transform and quantum eigenvalue-finding algorithm to JAVA quantum computer simulator.
- Technical environment included: Linux, IDEA, CVS

- **Personal Software Projects**

- *I do a lot of coding for fun; please see <http://www.davidgrant.ca/portfolio> for some of my code.*

Education

- **University of Waterloo**

Waterloo, ON

- *M.A.Sc., Electrical Engineering*

2002 - 2004

- Thesis: “Bottom-Gate TFTs With Channel Layer Deposited by Pulsed PECVD”
- Received Teaching Assistant award for tutorial work in Semiconductor Devices course.
- Created solver for multiple non-linear equations using Python.
- Automated thin-film transistor model fitting/parameter extraction in Python.

- **University of British Columbia**

Vancouver, BC

- *B.A.Sc. Engineering Physics (Electrical Engineering Option)*

1997-2002

- Graduated with Honors, GPA 86% (top 10th percentile in Engineering Physics)

Interests

Sports: Cycling, hiking, golf

Computing: Playing around with Linux, coding for fun, Django

Musical: Piano and guitar

Other: Travelling, cooking, reading about history, politics, investing, and science fiction