

# BJØRN HANSEN

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## EDUCATION

- **University of Washington**— Seattle, Washington, 2004 - 2007  
*Master of Science in Aeronautics and Astronautics*
  - Depth Area of Study: Plasma Science
- **University of Victoria**—Victoria, British Columbia, 2000 - 2004  
*Bachelor of Science*
  - Graduated with Distinction in June 2004 with a Major in Physics, and a Minor in Mathematics

## EXPERIENCE

- **Microsoft, XBOX**—Redmond, Washington, August 2008 - Present  
*Software Developer in Test*
  - Xbox One Shell Core, 2010 - 2013  
Developed test automation and core automation technology for the Xbox One. Set up telemetry instrumentation for the overlay shell UI and wrote code to analyze the usage data. Developed, as a “side project”, a system to enable Beta users to report issues directly from the console and automatically gather supplemental data to help developers understand issues. This became the primary method for filing bugs leading up to, and post, release. Partnered with developers across the console team to enable them to include their traces and data in this system.
  - Xbox 360 Foundation Test Tools, 2008 - 2010  
Developed and maintained tools to enable PC driven automated testing of the Xbox 360 shell, including a UI automation library and test harness. Successfully introduced unit testing and test driven development into my team.  
Developed automated tests for Kinect related shell features during the lead-up to initial Kinect launch.
- **Volt at Microsoft, XBOX**—Redmond, Washington, May 2008 - August 2008  
*Software Developer in Test*
  - Worked as part of the Xbox Foundation Team on development of the “Test Case Scheduler” test harness, which runs automated test cases from Product Studio and auto-files bugs. Also worked with team members on the UI automation technology. Additionally responsible for keeping Test Case Scheduler running on the test benches in the lab and following up on issues found during test runs.
- **Volt at Microsoft, Natural Language Group**—Redmond, Washington, August 2007 - May 2008  
*Software Developer in Test*
  - Developed automated tests to verify functionality of proofing tools, primarily the speller engine.
- **University of Washington, RPPL**— Seattle, Washington, September 2004 - August, 2007  
*Research assistant*

- Worked on an Innovative Confinement Concept device for magnetically confined fusion plasmas at the Redmond Plasma Physics Laboratory. Primary projects included design, implementation, and documentation of the glow discharge system, heater control system, and the vacuum control system software.

## SKILLS

- **Languages**
  - C++, C#, Python, CMD scripts, Java, Javascript, Perl, SQL
- **Software**
  - Development Environments: Visual Studio, Arduino, Eclipse, LabVIEW, Vim, Sublime
  - Debugging: Visual Studio Debugger, kd, gdb, pdb
  - Testing Frameworks: mstest, NUnit, xUnit, pyunit
  - Version Control: git, TFS, CVS, SubVersion, Bazaar, Source Depot
  - Mathematics: Matlab, SciPy, Pylab, Maxima, Mathematica
  - Graphics: Gimp, Inkscape, Blender
  - System Installation and Administration: Windows, Linux
- **Agile Development**
  - Test Driven Development
  - Pair Programming
  - Familiar with Scrum, Kanban
- Strong physics and mathematics background
- Enjoy working with a team
- Adept self-teacher

## TECHNICAL ACCOMPLISHMENTS

- **PyWeek 10 Winner (Team Category)**—March 2010  
*Team Organizer*
  - PyWeek is a Python programming challenge in which entrants write a game in one week, from scratch. “Oscilloscope” (<http://pyweek.org/e/calipygian/>) received the highest rating from other entrants.
- **Balder and Balder2D**—2001 - 2008  
*Project Administrator/Lead Programmer*
  - Balder and Balder2D are open source zero gravity shooters, written primarily in C++ and Python. Worked with distributed contributors. (<http://balder.sourceforge.net>)

## HOBBIES AND INTERESTS

- Soccer, game programming, 3D modeling, experimenting with, and contributing to, open source software, multitouch computing applications, cooking, pottery, drawing, playing games of all sorts (athletic, board, and computer based).

## REFERENCES

- Available on request