RYDER ZIOLA

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For a portfolio of past projects see www.ryderziola.ca

RESEARCH & WORK EXPERIENCE

Research Intern | Microsoft Research, Computational User Experiences group
2011.06 – 2011.09, Redmond, WA
- Constructed prototypes for using machine learning techniques to infer human activities from phone sensors
- Executed several extensive data collection studies to produce large sets of sensor data
- Worked under the mentorship of A.J. Brush and Scott Saponas

Research Assistant | Intel Labs Seattle
2009.10 – 2011.02, Seattle, WA
- Designed and built OASIS, an augmented-reality system for combining LEGO with projected, multimedia content
- Implemented a system for using a 3D depth camera for tracking hand gestures and objects on a surface
- Prominently demonstrated OASIS at multiple large venues, including the Intel booth at CES 2011, resulting in considerable press coverage, including Wired, CNN, Technology Review and Engadget
- Worked under the mentorship of Beverly Harrison

Teaching Assistant | University of Washington
2011.04 – 2011.06, Seattle, WA
- Acted as Teaching Assistant to the introductory Human-Computer Interaction class, which is focused around an intense term-long group project
- Mentored project teams through all phases of their project, including designing interfaces and running user studies
- Led design charettes for developing and refining ideas as a group

Software Design Engineer in Test | Microsoft Office 2010
2007.05 – 2009.09, Redmond, WA
- Worked on an overhaul of client/server communications in the Microsoft Office suite, enabling some key features in Office 2010 including background uploading, offline document availability, and collaborative coauthoring
- Personally responsible for the quality of the core synchronization logic and a rewritten WebDAV stack, helping move the product from preliminary planning stages through to beta
- Adopted a highly technical approach, designing and constructing a variety of tools while investigating, introducing, and evangelizing for new and unconventional testing techniques
- Developed a reputation for technical versatility and eagerness to support the technical growth of team members

Research Assistant | EDGELab, Dalhousie University
2005.06 – 2006.06, Halifax, Canada
- Undertook research involving novel methods of interpersonal interaction and collaboration using technology
- Completed an optional research thesis, developing a novel technique (DeskJockey) for integrating digital data into a physical desk, resulting in a publication
- Designed and implemented a system for sharing monitors between multiple users (Swordfish) and conducted related user studies

Freelance Work | rbjz postindustries
2004 – Present
- Performed freelance planning, design, and programming work for a variety of clients
- Used a diverse set of tools for a wide array of projects, including websites, content management systems, desktop applications, iOS applications, research prototypes, and others
- Developed and nurtured long-term relationships with clients

EDUCATION

University of Washington | Master of Science, Computer Science & Engineering
2009.09 – 2011.12, Seattle, WA
- Overall GPA: 3.74 / 4.0
- Focused on the intersection of machine learning and human-computer interaction
- Supervised by Dr. James Fogarty

Dalhousie University | Bachelor of Computer Science with First Class Honours
2003.09 – 2006.06, Halifax, Canada
- Overall GPA: 4.18 / 4.3
- Received the University Medal in Computing Science, awarded for the highest GPA in the graduating class
- Supervised by Dr. Kori Inkpen

SELECTED AWARDS & FELLOWSHIPS

2011 Intel Science and Technology Graduate Fellowship
Established by Intel to support research at the Intel Science and Technology Center for Pervasive Computing

2009 NSERC Postgraduate Scholarship
Provides $17,300 in support from the National Science and Engineering Research Council of Canada for conducting high-calibre research

2006 University Medal in Computing Science
Awarded for the highest GPA in the graduating class

2005 NSERC Undergraduate Summer Research Assistant (USRA)
Awarded by the National Science and Engineering Research Council of Canada to introduce new undergraduate students to research

PUBLICATIONS

Ryder Ziola, Shweta Grampurohit, Nate Landes, James Fogarty, and Beverly Harrison. **Examining Interaction with General-Purpose Object Recognition in LEGO OASIS**. In *Proceedings of 2011 IEEE Symposium on Visual Languages and Human-Centric Computing* (VL/HCC 2011). IEEE, Pittsburgh, PA, USA, 65-68.

Ryder Ziola, Shweta Grampurohit, Nate Landes, James Fogarty, and Beverly Harrison. 2010. **OASIS: Creating Smart Objects with Dynamic Digital Behaviors**. Presented at the *International Conference on Intelligent User Interfaces Workshop on Interacting with Smart Objects* (IUI 2010).

Ryder Ziola, Melanie Kellar, and Kori Inkpen. 2007. **DeskJockey: exploiting passive surfaces to display peripheral information**. In *Proceedings of the 11th IFIP TC 13 international conference on Human-computer interaction* (INTERACT'07). Springer-Verlag, Berlin, Heidelberg, 447-460.

Jim Wallace, Vicki Ha, Ryder Ziola, and Kori Inkpen. 2006. **Swordfish: user tailored workspaces in multi-display environments**. In *CHI '06 extended abstracts on Human factors in computing systems* (CHI EA '06). ACM, New York, NY, USA, 1487-1492.

Vicki Ha, Jim Wallace, Ryder Ziola, and Kori Inkpen. 2006. **My MDE: configuring virtual workspaces in multi-display environments**. In *CHI '06 extended abstracts on Human factors in computing systems* (CHI EA '06). ACM, New York, NY, USA, 1481-1486.