Curran Kelleher

curran.kelleher@gmail.com

Work Experience:

- Institute for Visualization and Perception Research at UMass Lowell - Lowell, MA
  Software Engineer and Research Assistant:June 2005 - August 2007, September 2008 - June 2010, September 2010 - present
    - Implemented session history recording and replay in the Universal Visualization Platform - IVPR's Java-based visualization platform
    - Worked with a team developing a visualization-based document management system in C#
    - Participated in creating the IEEE VAST 2007 Contest dataset
        - Wrote text processing utilities for named entity aggregation and search (Java, Lucene)
    - Authored JyVis, an open source interactive visualization platform (Java, Python, Groovy)
    - Worked as part of the development team of the Weave web-based visual analytics platform (Java, SQL, Flex, Grails)
    - Served as project co-manager, oversaw server side Weave development
- University of Konstanz - Konstanz, Germany
  Guest Researcher: June 2010 - August 2010
    - Designed and implemented the first version of the Universal Data Cube, a technology for dissemination and integration of semantically interlinked hierarchical data cubes.
- Computer Graphics Center (ZGDV) - Darmstadt, Germany
  Software Engineer and Research Assistant: October 2007 - August 2008
    - Designed and implemented software for overlaying hairstyles on face pictures (Java)
    - Worked with a team of three to design and implement a real-time vision-based 3D reconstruction and hand pose estimation system (C,C++,CUDA)
- New England Complex Systems Institute (NECSI) - Cambridge, MA
  Software Engineer and Research Assistant: January - June 2006
    - Worked with a team to develop a visualization and simulation platform for earth-wide socioeconomic dynamics (Java)
- University of Massachusetts Medical School - Worcester, MA
  Research Assistant in Dr. Willam Theurkauf's research lab: June 2004 - June 2005
    - Assisted graduate students with experiments investigating the role of RNAi components in drosophila embryonic axis specification and related phenomena

Additional Experience:

- lifeofaprogrammergeek.blogspot.com - ongoing - a growing collection of technical guides for how to install, setup, and use a wide variety of software, mainly in Linux
- Author of LiquidMath - December 2007 - an open source Java mathematical visualization library, including a math expression parser and 3D graphics library
- Massachusetts Institute of Technology - Cambridge, MA
  Teacher in the High School Studies Program - July - August 2007
    - Co-taught an 8-week course with MIT student Justin Curry, entitled "Gödel, Escher, Bach: A Mental Space Odyssey". Lecture videos available on MIT's OpenCourseWare
- Am a jazz guitarist and electronic music enthusiast

Publication:

- Howard Goodell, Chih-Hung Chiang, Curran Kelleher, Alex Baumann, Georges Grinstein, "Collecting and Harnessing Rich Session Histories," *iv*, pp. 117-123, Tenth International Conference on Information Visualisation (IV'06), 2006

Education:

- University of Massachusetts Lowell - Lowell, MA
    - Bachelors Degree in Computer Science with Bioinformatics option - Awarded December 2010
        - Cumulative GPA 3.500, Honors Program Participant
    - Currently enrolled in the Ph. D. program in Computer Science

- Techniche Universität Darmstadt - Darmstadt, Germany
  Study abroad - September 2007 - August 2008
    ◦ Studied Computer Science and German for two full semesters. Gained fluency in German
- Massachusetts Institute of Technology - Cambridge, MA
  Intensive Course in Dynamics of Complex Systems - January 2006
    ◦ One week intensive course taught by Yaneer Bar Yam, focused on complex systems and applications in physical, biological and social systems.