Michael Hewner

CONTACT INFORMATION

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INTERESTS

CS Education and CS Education Research

EDUCATION

Georgia Tech, Atlanta, Georgia

Ph.D., Human–Centered Computing, (anticipated) December 2011

- Thesis Topic: *Student Conceptions About the Field of Computer Science*
- Thesis Proposal Accepted January 2010
- Adviser: Professor Mark Guzdial
- Area of Study: Computer Science Education
- GPA 4.0

University of Illinois at Urbana–Champaign, Urbana, Illinois

M.S., Computer Science, May 2003

- Thesis Topic: *Implementing the Tagged Integer Optimization on the .NET Virtual Machine*
- Adviser: Professor Ralph Johnson
- Area of Study: Software Engineering, Object–Oriented Programming
- GPA 3.81

B.S., Computer Science, December 2001

- Graduated in 2.5 years
- GPA 3.61

TEACHING EXPERIENCE

Georgia Tech, Atlanta, Georgia

Student Mentor **Fall 2010**
CS 6452: Rapid Prototyping (graduate course)

- Topics: Jython, GUI frameworks, networking, OO–design, databases
- Held regular office hours, responded to student emails
- Taught 2 lectures: Python Fundamentals and Databases

Teaching Practicum **Fall 2009**
CS 2110: Computer Organization and Programming (undergraduate level course)

- Topics: processor architecture, assembly language, C
- Observed classes, TA recitations, and met weekly with teacher to discuss teaching
- Taught guest lectures on Memory Mapped IO and The Stack/Malloc

Governor's Honors Program, Valdosta, Georgia
A competitive summer program for high school juniors sponsored by the state of Georgia

Math Lab Tech **Summer 2010**
Introductory Delphi Programming (high school course)

- Topics: variables, functions, GUIs, functions, Monte Carlo simulations, complex math
- Co–taught multiple daily classes of introductory programming for advanced high school math students

- Advised students on self–directed programming projects
- Taught guest lectures on P/NP, Graph Theory, Graph Coloring, Embedded Device Programming, and Unix Command Line usage
- Will return in Summer 2011 as full instructor

University of Washington, Seattle, Washington

Visiting Instructor **Summer 2008**

CSE143: Computer Programming II (undergraduate course)

- Topics: algorithm design, objects, recursion, linked–listed, trees
- Taught 80+ students
- Developed lectures, exams, managed TAs

University of Illinois, Urbana, Illinois

Teaching Assistant **Spring 2002–Spring 2003**

Software Engineering I and II (mixed graduate/undergraduate course)

- Topics: software processes, UML, object–oriented design, project management, software tools
- TA for 80+ students
- Held regular office hours, managed student project work
- Developed and graded homeworks and exams
- Led other TAs

Teaching–Related Experiences

Mini–courses

- High School Mentor Training: Three Lectures on the Subfields of CS and Student Goals (Spring 2010)

Guest Lectures

- High School Presentation: Careers in Video Game Programming (August 2010 and February 2011)
- Educational Technology Class: Identity and CS Education (November 2009)
- Sample lecture for Teaching Course: Big O (November 2009)
- Educational Technology Class: Resnick and Distributed Thinking (February 2009)
- High School Presentation: Subfields of CS (Fall 2008)

Student Mentoring

- Tutored math at Rainier Beach High School (Fall 2006)
- Mentored high school students as part of Community for Youth program (Fall 2004—Fall 2006)

Publications

M. Hewner and M. Guzdial. *What Game Developers Look for in a New Graduate: Interviews and Surveys at One Game Company.* presented at ACM Technical Symposium on Computer Science Education (SIGCSE 2010). Milwaukee, WI USA, March 10-13, 2010.

A. Bruckman, M. Biggers, B. Ericson, T. McKiln, J. Dimond, B. DiSalvo, M. Hewner, L. Ni, S. Yardi. *'Georgia computes!': improving the computing education pipeline.* presented at ACM Technical Symposium on Computer Science Education (SIGCSE 2009). Chattanooga, TN USA, March 4-7, 2009.

M. Hewner and M. Knobelsdorf. *Understanding Computing Stereotypes with Self-Categorization Theory.* presented at Koli Calling International Conference on Computer Science Education (Koli Calling 2008). Koli National Park, Finland, November 13 - 16, 2008.

M. Hewner and M. Guzdial. *Attitudes about Computing in Postsecondary Graduates.* presented at Fourth International Computing Education Research Workshop (ICER 2008). Sydney, Australia, September 6-7 2008.

Industry Experience

Zipper Interactive, Seattle, Wahington

Video Game Programmer **May 2009–August 2009**

- Programmed C++ for two Playstation 3 first person shooter titles
- Interviewed developers about what they for in a programmer hire

Amazon.com, Seattle, Wahington

Software Engineer **June 2003–June 2006, January 2007–July 2007**

- Technical Lead for a 7 person team, coded many projects in C++ and Perl
- Promoted after 1.5 years to SDE II
- Developed "Ninja Coder" programming riddle project
- Interviewed 100+ developer candidates

Progressive Insurance, Cleveland, Ohio

Developer Intern **Summer 2002, Summer 2001**

- Developed Smalltalk for rate setting system
- Developed Visual Basic for Progressive website

National Center for Supercomputing Applications, Urbana, Illinois

Student Programmer **December 1999–September 2000**

- Worked on system for predicting molecular structure
- Built system for atom categorization

References

Mark Guzdial (email: guzdial@cc.gatech.edu; phone: 404–894–5618)

- Professor, Georgia Tech
  - ◇ *Mark is my adviser.*

Keith Edwards (email: keith@cc.gatech.edu; phone: 404–385–6783)

- Professor, Georgia Tech
  - ◇ *Keith observed my teaching/student interactions in the Rapid Prototyping course and is also on my dissertation committee.*

Ralph Johnson (email: johnson@cs.uiuc.edu; phone: 217–244–0093)

- Professor, University of Illinois at Urbana–Champaign
  - ◇ *Ralph was my Masters adviser and taught the software engineering courses I TAed.*