

**Cole Sherer**  
137 Byran St.  
Athens, GA 30601  
(706) 326-6878  
E-mail: koleslaw@uga.edu

## EDUCATION

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### **PhD Computer Science**

In Progress – University of Georgia (UGA), expected graduation August 2012

### **BS Mathematics, BS Computer Science** – emphasis in Software Design

May 2007 - University of Georgia (UGA), Franklin College of Arts and Sciences

## WORK EXPERIENCE

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**Instructor (Discrete Mathematics)**, (January 2012 – Present)

**Instructor (Software Development)**, (August 2011 – December 2011)

**Teaching Assistant (Software Development)**, (January 2011 – May 2011)

**Teaching Assistant (Operating Systems)**, (August 2010 – December 2010)

Computer Science Department, UGA

- Hold weekly office hours to answer questions and assist with projects
- Grade homework, quizzes, summary papers, and programming projects

**Instructor (Programming for the Web)**, (July 2010 – August 2010)

**Instructor (Java for Video Games)**, (May 2011 – June 2011)

**Instructor (Team Programming for Video Games)**, (June 2011 – August 2011)

Talent Identification Program, Duke University

- Write and present lectures to a class of 7<sup>th</sup> - 10<sup>th</sup> grade gifted students
- Teach a 3-week introductory course with over 100 hours of instruction

**Teaching Assistant (Java for Video Games)**, (May 2008 – June 2010)

Talent Identification Program, Duke University

- Assist instructor in leading class discussions and planning lessons
- One-on-one tutoring with the students (7<sup>th</sup>-8<sup>th</sup> grade gifted students)

**Owner / Lead Developer**, (September 2009 – Present)

Ginger Magic Games, LLC – Athens, GA

- Hire and manage all team members for multiple projects under simultaneous development
- Handle all legal and financial matters for the company
- Act as the core developer for projects in C# and Flex for iPhone, Xbox 360 and FaceBook

**IT Professional Associate**, (January 2007 – January 2008 & July 2008 – May 2010)

**Web Developer**, (September 2006 – January 2007)

Southern Regional Extension Forestry, College of Ag. & Environmental Sciences, UGA

- Used Plone content management system along with Zope, CSS, HTML, JavaScript, Python and Flash to create and maintain websites
- Ported websites from older Plone versions and from MySQL / PHP to Plone 2.5 & 3.0

**Research Assistant**, (January 2008 – May 2008)

Computer Science Department, UGA

- Researched the parallel and distributed capability of the Cell Broadband processor for high performance computing (HPC) with Dr. David Lowenthal ([dkl@cs.uga.edu](mailto:dkl@cs.uga.edu))
- Worked with IBM's Cell SDK 2.1 on a Sony PlayStation 3 running Fedora 6

## PROGRAMMING EXPERIENCE

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### **SASSY – Scalable Agent-Based Simulation System (Java)**, (Spring 2010 – Present)

- Currently implementing the Agent-based programming interface on top of a pre-existing parallel discrete event simulation core
- Using the Agent-based PDES to study social animal behavior and financial markets

### **Nachos (C/C++)**, (Fall 2007)

- A simulated 64-bit Operating System running on a Linux machine
- Implemented threads, semaphores, system calls, multiprogramming, virtual paging and a filesystem

### **Mooch (Java)**, (Fall 2006)

- Engineered a Jabber and Google Talk instant messenger with a five-person team.
- Mooch contains voice chat, text-based chat, and screen-sharing that allows one to view and interact with another person's screen remotely
- Over 15,000 lines of code
- <http://sourceforge.net/projects/mooch/>

## PROGRAMMING COMPETITIONS

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### **TopCoder Algorithmic Programming Contests**, (October 2005 - Present)

- Contacted TopCoder's collegiate recruiter to bring the College Tour to UGA
- Placed 1<sup>st</sup> (2007), 3<sup>rd</sup> (2006), and 2<sup>nd</sup> (2005) at the local College Tour contest
- Passed the qualifying round in the 2006 TopCoder Collegiate Challenge

### **ACM International Collegiate Programming Contest**, (2005 – 2006)

- Placed 6<sup>th</sup> of 67 teams at the 2006 Southeastern US Regional
- Placed 21<sup>st</sup> of 63 teams at the 2005 Southeastern US Regional
- Wrote a scoring script to simulate competition during team practices

### **UCSB International Capture the Flag Hacking Competition**, (Fall 2007)

- Placed 28<sup>th</sup> of 35 teams in our school's first attempt at the contest
- Patched python bugs on our server and exploited these bugs on the other teams' servers

## PROGRAMMING LANGUAGES

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### **High Proficiency (5+ years)**

- Java, C++, C, HTML, CSS

### **Medium Proficiency (1 – 5 years)**

- Python, JavaScript, PHP, C# (XNA and Unity), Flash/ActionScript, SML, Scheme, Prolog, TorqueScript, MIPS Assembly, 6502 Assembly

## COMPUTER SCIENCE COURSES

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UNIX Systems Programming, Theory of Computing, Data Structures, Software Engineering, Programming Languages, Artificial Intelligence, Graph Theory, Computer Architecture, Computer Graphics, Computer Animation (Maya), Compilers, 2-D Game Programming, 3-D Game Programming, Operating Systems, Algorithms, Database Management, Computer Networks, Parallel and Distributed Computing, System Performance Evaluation, Computer Vision, AI and the Web, Simulation and Modeling, Parallel and Distributed Simulation, Computer Network Attacks and Defenses, Interactive Media as Drama (iPhone Programming)