

# William Cody Boisclair

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phone: +1 781 333 8038 codyboisclair@gmail.com

## Natural Language Processing Research Engineer

### EDUCATION

**Ph.D., Computer Science, The University of Georgia, Athens, GA** **August 2011**  
Dissertation: *SYCORAX: An Automated Analyzer of the Syntactic Complexity of English Text*  
Advisors: Michael Covington, Walter D. Potter  
GPA: 3.87/4.00

**B.S., Computer Science, Mercer University, Macon, GA** **May 2005**  
GPA: 3.91/4.00

### TECHNICAL SKILLS

**Programming Languages** Java, Python, Groovy, C#, C++, Perl, PHP, JavaScript, SQL, Prolog, AppleScript  
**Operating Systems** Windows 3.1-10, 2003 Server; Ubuntu and Fedora Linux; Mac OS X 10.3-10.12  
**Graphic Design** Adobe Creative Cloud; Corel Draw 11  
**Development Environments** Eclipse; NetBeans; Microsoft Visual Studio; MonoDevelop; Xcode

### AWARDS AND HONORS

**Mercer University, Macon, GA**  
Eugene Bell Award for Excellence in Computer Science, 2005  
Inducted into Upsilon Pi Epsilon (Computer Science Honor Society), 2004  
Outstanding Junior in Computer Science, 2004  
Outstanding Sophomore in Computer Science, 2003

**Association for Computing Machinery Southeastern Regional Programming Contest**  
Member of first place Division 2, 2004  
Member of first place Division 2, 2003

**Consortium for Computing Science in Colleges Southeastern Small College Programming Contest**  
Member of first place team, 2004  
Member of second place team, 2003

### PRESENTATIONS

Boisclair, Cody. 2012. SYCORAX: An automated analyzer of the syntactic complexity of English text. Presentation at 2012 Georgetown University Round Table on Languages and Linguistics (GURT), Washington, DC.

Boisclair, Cody. 2008. Developing a tokenizer and morphological parser for English text in C#. Paper presented at the 46th ACM Southeast Conference, Auburn, AL.

### TEACHING EXPERIENCE

**The University of Georgia, Athens, GA** **2006-2010**  
Teaching assistant for freshman-level Computational Science, as well as graduate-level courses in Symbolic Programming and Automata and Formal Languages.

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## NATURAL LANGUAGE PROCESSING EXPERIENCE

### **Nuance Communications, Cambridge, MA** **2013-Present**

Research engineer for Samsung S Voice and Nuance Cloud Services natural language understanding platforms. Worked to improve accuracy of intent classification and entity detection in text transcripts of utterances processed by the system. Refactored tools to improve memory efficiency of the tagger, and developed various utilities to aid in the language model training and evaluation process. Contributed to development of statistical confidence models for estimating the tagger's correctness on new queries based on natural language features found in prior reference queries.

### **Nuance Communications, Burlington, MA** **2011-2013**

Research engineer for the DeepQA question answering system, a joint research project with IBM. Worked to improve the system's accuracy for questions in the medical domain, by preprocessing medical texts to make them more suited to retrieval, and by extracting structured relations from the texts for query expansion.

## WEB DEVELOPMENT EXPERIENCE

### **Consumer Credit Counseling Service, Macon / Augusta, GA** **2004-2014**

Redesigned company's web sites using web standards. Reprogrammed online application forms in PHP to add greater interactivity. Designed interactive JavaScript-based tools for visitors to evaluate their finances.

### **Consumer Credit Counseling Service, Las Vegas, NV** **2007-2014**

Redesigned company's web site using web standards. Developed web applications in PHP for registration and interface with payment processing system.

### **Self-Employed** **1997-Present**

Designed and developed web sites as a freelancer using the name "XXXVIII Designs," marketed primarily to local and regional non-profit organizations.

## DATABASE DEVELOPMENT EXPERIENCE

### **Consumer Credit Counseling Service, Macon / Augusta, GA** **2004-2014**

Developed C# applications to import data from web site, and account information received from Capital One, into proprietary client management software. Developed SQL queries and corresponding Crystal Reports for demographic information on an ongoing basis.

### **Municipal Court, Macon, GA** **1999**

Imported data from court information system into Microsoft Access. Created reports and queries to analyze the court's financial situation.

## SYSTEM ADMINISTRATION EXPERIENCE

### **Consumer Credit Counseling Service, Macon / Augusta, GA** **2004-2014**

Maintained organization's Windows 2003 servers, including deployment of group policy throughout offices. Aided with consolidation of systems after merger with office in Augusta. Aided with reconfiguration of network equipment, including Cisco PIX, during transition to new ISP.

### **Consumer Credit Counseling Service, Las Vegas, NV** **2007-2014**

Acted as ongoing consultant for server maintenance. Aided with agency systems upgrade in 2011.

**References available on request**