Caius Brindescu

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Profile

I am a seventh year PhD student at Oregon State University. I am studying Computer Science and my main interests include software evolution and version control systems. I am also interested in automated program transformation and program analysis. My main research goal is to make developer's lives easier by developing tools that aid in program comprehension and enable an easier way to work with software changes.

Education

2013 - present **PhD in Computer Science at Oregon State University**

Research Interests: Software evolution and version control systems. I am continuing the PhD I started at UIUC and I working with Dr. Carlos Jensen.

2012 - 2013 **PhD in Computer Science at University of Illinois at Urbana-Champaign**

Research Interests: Software evolution and software design. I worked with Dr. Danny Dig.

2007 - 2011 **Bachelor of Science in Computer Engineering at "Politehnica" University, Timişoara**

Subjects studied: Software Engineering, Object Oriented Programming, Operating Systems, Databases.

Work Experience

06/18 - 09/18 Software Engineer at **Etleap Inc.**

Responsibilities: Develop a proof of concept integration with data privacy services; Implement new features and extend existing features; Support and bugfixing

03/12 - 07/12 Research Engineer at **Politehnica Univesity of Timişoara** and Software Engineer at **Movidius Inc**

Responsibilities: Joint project between the university and Movidius. My task was implementing an Eclipse based IDE to support multi-core debugging of embedded systems.

Summer 2011 Internship at **University of Illinois at Urbana-Champaign** under the supervision of Danny Dig.

Responsibilities: Extending the existing *ReLooper* tool with a way to solve data-races via privatization. It is built as an Eclipse plugin and uses the WALA framework for static analysis.

Summer 2009 & Summer 2010 Internship at **Politehnica University of Timişoara** under the supervision of Radu Marinescu

Responsibilities: Researching a method to use automated refactoring to solve bad smells in code. Determining the right refactoring strategy was done using metric-based algorithms. Looked for applications in the Refuse Parent Bequest design flaw. I also implemented a refactoring engine to be used to improve the design of software products.

Summer 2008 Internship at **Incremental SRL**

Responsibilities: Servicing computers

Teaching Experience

Fall 2018	Instructor for Software Engineering I (CS 361) at Oregon State University **Responsibilities:** Prepare lecture material and assignments, organize and coordinate student projects, office hours and mentoring.
Spring 2018	Teaching Assistant for Lab Studies in SE and HCI (CS 567) at Oregon State University **Instructor:** Anita Sarma **Responsibilities:** Office hours, grading and creating assignments. I am also supervising student teams for their class project.
Winter 2018	Teaching Assistant for Software Engineering II (CS 362) at Oregon State University **Instructor:** Ali Aburasa **Responsibilities:** Office hours and grading.
Fall 2017	Teaching Assistant for Software Engineering I (CS 361) at Oregon State University **Instructor:** Anita Sarma **Responsibilities:** Office hours, grading and preparing assignments.
Summer 2017	Instructor for Web Development (CS 290) at Oregon State University **Responsibilities:** Preparing lecture material and designing the assignments, lecturing and office hours.
Spring 2017	Teaching Assistant for Empirical Software Engineering (CS 569) and Advanced Software Engineering (CS 562) at Oregon State University **Instructor:** Anita Sarma and Danny Dig **Responsibilities:** Office hours and grading
Winter 2017	Teaching Assistant for Mobile and Cloud Development (CS 498) and Empirical Software Engineering (CS 569) at Oregon State University **Instructor:** Justin Wolford and Anita Sarma **Responsibilities:** Office hours and grading
Fall 2016	Teaching Assistant for Software Engineering I (CS 361) at Oregon State University **Instructor:** Alex Groce **Responsibilities:** Office hours and grading
Spring, Summer 2016	Teaching Assistant for the online version of Senior Software Projects (CS 419) at Oregon State University **Instructor:** Benjamin Brewster **Responsibilities:** Monitoring the teams progress and grading
Winter 2016	Teaching Assistant for Operating Systems I (CS 344) at Oregon State University **Instructor:** Benjamin Brewster **Responsibilities:** Office hours and grading
Fall 2015	Teaching Assistant for Software Engineering I (CS 361) at Oregon State University **Instructor:** Anita Sarma **Responsibilities:** Office hours and grading
Summer 2015	Teaching Assistant for the online version of Software Engineering I (CS 361) at Oregon State University. **Instructor:** Iftekhar Ahmed **Responsibilites:** Grading

Spring 2015	Teaching Assistant for Software Engineering II (CS 362) at Oregon State University. **Instructor:** Alex Groce **Responsibilities:** Grading and holding office hours.
Winter 2015	Teaching Assistant for Software Engineering I (CS 361) at Oregon State University. **Instructor:** Danny Dig **Responsibilities:** Creating and grading homework. Mentoring teams of four students and helping them make constant progress throughout the term.
Fall 2014	Instructor for Seminar: Grad Intro (CS 507) at Oregon State University **Supervising professor:** Bella Bose **Responsibilities:** Holding a 50-minute lecture each week about topics relating to the graduate program (e.g. doing literature searches, preparing a presentation etc.)
Spring 2013	Teaching Assistant for Software Engineering II (CS 428) at University of Illinois at Urbana-Champaign. **Instructor:** Danny Dig **Responsibilities:** Creating and grading homeworks. Mentoring teams of eight students so they make constant progress on their class project.
Fall 2012	Teaching Assistant for Software Engineering I (CS 427) at University of Illinois at Urbana-Champaign. **Instructor:** Ralph Johnson **Responsibilities:** Creating and grading homeworks. Supervising student teams for the class project.

Publications

ESEJ To Appear	**The Life-Cycle of Merge Conflicts: Processes, Barriers, and Strategies** Nicholas Nelson, Caius Brindescu, Shane McKee, Anita Sarma, Danny Dig *Empirical Software Engineering Journal*
ESEM '17	**An Empirical Examination of Code Smells and Their Impact on Collaborative Work** Iftekhar Ahmed, Caius Brindescu, Umme Ayda Mannan, Carlos Jensen, Anita Sarma *International Symposium on Empirical Software Engineering and Measurement*, Toronto, Ontario, Canada, November 2017. Acceptance rate: 26% (74/273)
FSE '16	**Can Testedness be Effectively Measured?** Iftekhar Ahmed, Rahul Gopinath, Caius Brindescu, Alex Groce, Carlos Jensen *International Symposium on the Foundations of Software Engineering*, Seattle, WA, USA, November 2016. Acceptance rate: 26% (74/273)
ICSE '14	**How Do Centralized and Distributed Version Control Systems Impact Software Changes?** Caius Brindescu, Mihai Codoban, Sergii Shmarkatiuk, Danny Dig *International Conference on Software Engineering*, Hyderabad, India, May 2014 Acceptance rate: 20% (99/499)

Service

I served as an external reviewer for the following conferences: ECOOP '15, ASE '14, ECOOP '13, ASE '17, ASE '17 Tool Demos and ICSE '19. I was also a student volunteer for OOPSLA '14, FSE '16 and FSE '18.

I was on Program Committee for the Tool Track at SCAM '15, the Mining Challenge at MSR '17 and the Showpiece track at VL/HCC '17.

Invited talks

10/2014 *How do Centralized and Distributed Version Control Systems Impact Software Changes?*
Talk in CS 561 (Software Engineering) at Oregon State University. Host: Danny Dig

09/2012 *Code Smells*
Lecture in CS 427 (Software Engineering I) at University of Illinois at Urbana-Champaign. Host: Ralph Johnson