

# Ganesha Upadhyaya

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Objective	Obtain a full-time researcher position in the area of programming languages, compilers, program analysis, mining software repositories, and concurrent programming.	
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Contact	(515) 509 - 0934 <a href="http://web.cs.iastate.edu/~ganeschau/">http://web.cs.iastate.edu/~ganeschau/</a> <a href="https://github.com/gupadhyaya">https://github.com/gupadhyaya</a> <a href="mailto:ganeschau@iastate.edu">ganeschau@iastate.edu</a>	115-2 Atanasoff Hall Dept. of Computer Science Iowa State University Ames, IA 50011-1041, USA
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Education	<b>Ph.D., Computer Science</b> , Iowa State University, USA <b>M.Sc., Computer Science</b> , Iowa State University, USA <b>B.E., Computer Science</b> , R.V. C. E., Bangalore, India	<i>In progress</i> <i>Jan 2015</i> <i>Aug 2007</i>
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Publications	<b>[ICSE 2017]</b> Ganesha Upadhyaya and Hridesh Rajan, “On Accelerating Ultra-Large-Scale Mining,” International Conference on Software Engineering 2017, NIER Track.  <b>[MSR 2017]</b> Nitin M Tiwari, Ganesha Upadhyaya, Hoan Nguyen and Hridesh Rajan, “Candoia: A Platform for Building and Sharing Mining Software Repositories Tools as Apps,” International Conference on Mining Software Repositories 2017.  <b>[Modularity 2016]</b> Yuheng Long, Mehdi Bagherzadeh, Eric Lin, Ganesha Upadhyaya and Hridesh Rajan, “On Ordering Problems in Message Passing Software,” International Conference on Modularity 2016.  <b>[ICSE 2016]</b> Nitin M Tiwari, Ganesha Upadhyaya and Hridesh Rajan, “Candoia: A Platform and an Ecosystem for Building and Deploying Mining Software Repository Tools,” International Conference on Software Engineering 2016, Poster Track.  <b>[OOPSLA 2015]</b> Ganesha Upadhyaya and Hridesh Rajan, “Effectively Mapping Linguistic Abstractions for Message-passing Concurrency to Threads on the Java Virtual Machine,” Object-oriented Programming, Systems, Languages, and Applications 2015.  <b>[AGERE 2014]</b> Ganesha Upadhyaya, and Hridesh Rajan, “An Automatic Actors to Threads Mapping Technique for JVM-based Actor Frameworks,” International Workshop on Programming Based on Actors, Agents, and Decentralized Control 2014.	
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Works Under-Submission	- Accelerating Source Code Analysis At Massive Scale - Process Graphs: A Model for Performance Analysis of Actor-Based Programs - Selecting and Optimizing Graph Traversal Strategy for Analyzing Big Code	
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Appointments	<b>Research Assistant</b> , Laboratory for Software Design, Iowa State University, USA Research Projects:	2010 - Current
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- 1) [Panini](#): An implicit concurrent programming language. I have worked on implementing and maintaining Panini compiler and runtime, where I have implemented automatic garbage collection, performance tuning, and performance analysis models for Panini.
- 2) [Boa](#): A language and infrastructure for mining massive code bases. I have worked on enabling and accelerating program analysis in Boa.

SDE Intern, Amazon.com, Inc., Seattle, WA *Summer 2011*  
Analyzing frequent patterns of server failures and building machine learning models.

Industry Software Developer, SAP Labs, Bangalore, India *2008 - 2010*  
Experience Worked on integrating data analysis tools from different platforms. Building data  
3 years models, backend services (data, persistence, login, user-management), UI services.

Software Developer, Business Objects, Bangalore, India *2007 - 2008*  
Building Web Intelligence (WebI) and Enterprise Performance Management (EPM) tools.

Software Engineer Intern, HP Labs, Bangalore, India *2007*  
Worked on load balancing, global object space and thread migration functionalities of Distributed Java Virtual Machine (DJVM) for HP MPP.

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Presentations “Collective Program Analysis”, at the 8th Midwest Verification Day, Ames, Iowa State University, October 21-22, 2016  
“Candoia: A Platform and Ecosystem for Mining Software Repositories Tools”, at 38th International Conference on Software Engineering (ICSE), Austin, TX, May 14-22, 2016  
“Effectively Mapping Linguistic Abstractions for Message-passing Concurrency to Threads on the Java Virtual Machine”, at the 2015 ACM SIGPLAN International Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA), Pittsburgh, PA, October 23-30, 2015  
“An Automatic Actors to Threads Mapping Technique for JVM-based Actor Frameworks”, at the 4th International Workshop on Programming based on Actors, Agents, and Decentralized Control (AGERE), Portland, OR, October 20, 2014

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External Registration Co-chair, The Midwest Big Data Summer School 2016.  
Services Program Committee member, SPLASH OOPSLA Artifacts 2016.  
External reviewer, 38th International Conference on Software Engineering (ICSE), 2016.  
External reviewer, 15th International Conference on Modularity, 2016.  
External reviewer, 14th International Conference on Generative Programming: Concepts & Experience (GPCE), 2015.  
External reviewer, ACM SIGPLAN International Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA), 2013.

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Computer Languages: Java, C, C++, Perl, Python, JavaScript  
Skills Tools & Frameworks: Eclipse, Soot, LLVM, Hadoop, Spark, Boa

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