
Delvin Defoe

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Education

2004–2007	Washington University St Louis, MO	<ul style="list-style-type: none">– Adviser: Ron K. Cytron– Ph.D., Computer Science, August 2007– Dissertation: “Exploration of Dynamic Memory Management Systems”– Research Adviser: Ron K. Cytron
2001–2003	Washington University St Louis, MO	<ul style="list-style-type: none">– M.S., Computer Science, December 2003– Thesis: “Storage Coalescing”– Research Adviser: Ron K. Cytron
1998–2001	Midwestern State University Wichita Falls, TX	<ul style="list-style-type: none">– B.S., Computer Science and Mathematics, May 2001– Research Adviser: Nelson Passos

Teaching Experience

Fall 2007–present	Assistant Professor	<ul style="list-style-type: none">– Dept. of Computer Science and Software Engineering– Rose-Hulman Institute of Technology– Developed and taught new courses including Introduction to Software Development and Dynamic Storage Reclamation– Taught and improved the Operating Systems course– Taught Computer Architecture
Fall 2004	Lecturer Mathematical Tools for Computer Science	<ul style="list-style-type: none">– Designed course syllabus; developed lecture materials, homework and lab assignments– Gave lectures and graded assignments– Collaborated with faculty and fellow graduate students in designing and delivering the course– Lectured on topics including linear algebra, data fitting, probability and statistics, and a variety of other Math topics relevant to upper level Computer Science courses
Fall 2002	Teaching Assistant Operating Systems	<ul style="list-style-type: none">– Assisted students, graded homework, exams, and group projects
Fall 2002	Guest Lecturer Computer Science I	<ul style="list-style-type: none">– Developed lecture material and gave lecture on recursion to freshman undergraduate students

Fall 1992 - Fall 1997

- Math Teacher**
High School Mathematics Courses
- Isaiah Thomas Secondary School
 - St. Joseph, Dominica
 - Designed course syllabi; developed lecture materials, homework, tests, exams, and other assignments
 - Presented lectures; graded homework assignments, tests, exams, and other assignments

Professional Appointments

Aug. 2007 - Present

- Assistant Professor**
- Dept. of Computer Science & Software Engineering
 - Rose-Hulman Institute of Technology, Terre Haute, IN
 - Supervisor: Cary Laxer

Aug. 2001 - Aug. 2007

- Graduate Research Assistant**
- Center for Distributed Object Computing
 - Washington University, Saint Louis, MO
 - Supervisor: Ron Cytron

Jun. 1999 - May 2001

- Undergraduate Research Assistant**
- Compilers And Enhanced System Architecture Research
 - Midwestern State University, Wichita Falls, TX
 - Supervisor: Nelson Passos

Sep. 1992 - Dec. 1997

- Mathematics Teacher**
- Isaiah Thomas Secondary School, Saint Joseph, DOMINICA
 - Supervisor: Arthlene Douglas-Murdock

Publications and Talks

Dissertation / Thesis

1. Delvin C. Defoe. *Exploration of Dynamic Memory Management Systems*. PhD thesis, Washington University in St. Louis, August 2007. Available as Washington University Technical Report WUCSE-2007-45.
2. Delvin C. Defoe. Effects of coalescing on the performance of segregated size storage allocators. Master's thesis, Washington University in St. Louis, 2003. Available as Washington University Technical Report WUCSE-2003-69.

Journal Publications

1. Stan Kurkovsky and Delvin Defoe. Short mobile game development projects for cs1/2: tutorial presentation. *J. Comput. Small Coll.*, 26(6):163–164, June 2011.
2. Delvin Defoe, Stan Kurkovsky, and Emily Graetz. Short mobile game development projects for introductory cs courses: conference workshop. *Journal of Computing Sciences in Colleges*, 26(5):141–143, May 2011.
3. Delvin Defoe, Stan Kurkovsky, and Emily Graetz. Mobile game development projects for introductory cs courses: tutorial presentation. *Journal of Computing Sciences in Colleges*, 26(4):93–94, April 2011.
4. Delvin Defoe, Rob LeGrand, and Ron Cytron. Cost analysis for real-time java scoped-memory areas. *Journal of Systemics, Cybernetics, and Informatics*, 5(4), 2007. Journal version of CCCT'06 paper. This paper is published at <http://www.iiisci.org/Journal/SCI/Contents.asp?var=&previous=ISS5626>.

Conference/Workshop Publications

1. Stan Kurkovsky and Delvin Defoe. Short mobile game development projects for cs1/2: conference workshop. In *Proceedings of the 42nd ACM technical symposium on Computer science education, SIGCSE '11*, New York, NY, USA, March 2011. ACM.
2. Delvin C Defoe, Rob LeGrand, and Ron K Cytron. On the connection between functional programming languages and real-time java scoped memory. In *JTRES '07: Proceedings of the 5th international workshop on Java technologies for real-time and embedded systems*, pages 73 – 82, New York, NY, USA, September 2007. ACM.
3. Delvin C Defoe, Rob LeGrand, and Ron K Cytron. Asymptotic analysis for real-time java scoped-memory areas. In *CCCT 2006: The 4th International Conference on Computing, Communications and Control Technologies*, volume II, pages 131 – 138, Orlando, FL, July 2006. International Institute of Informatics and Systemics. Won best paper award in the Computing Technologies Session.
4. Delvin C. Defoe, Sharath R. Cholleti, and Ron K. Cytron. Upper bound for defragmenting buddy heaps. In *LCTES '05: Proceedings of the 2005 ACM SIGPLAN/SIGBED conference on Languages, compilers, and tools for embedded systems*, pages 222–229, New York, NY, USA, 2005. ACM Press.
5. Nelson Passos, Delvin Defoe, Reynold Bailey, Ranette Halverson, and Richard Simpson. Theoretical constraints on multi-dimensional retiming design techniques. In *AeroSense-Aerospace Defense Sensing, Simulation and Controls*, Orlando FL, April 2001.
6. Reynold Bailey, Delvin Defoe, Ranette Halverson, Richard Simpson, and Nelson Passos. A study of software pipelining for multi-dimensional problems. In *13th International Conference on Parallel and Distributed Computing Systems*, pages 426–431, Las Vegas NV, August 2000.

Technical Reports and Other Non-refereed Papers

1. Sharath R. Cholleti, Delvin Defoe, and Ron K. Cytron. Heap defragmentation in bounded time. Technical Report WUCSE-2004-58, Washington University, Saint Louis, MO, October 2004.

Presentations and Other Talks Given

1. Delvin Defoe, Matthew Boutell, and Curtis Clifton. Pytetris. CCSC:Midwest 2010 Nifty Tools and Assignments, Sept. 2010.

Research Funding

Multiprocessor Dynamic Storage Reclamation

**Rose-Hulman Summer
Professional
Development Grant**
\$5,000

2009

- Authored a proposal for exploring the development of fast, multiprocessor, dynamic storage reclamation techniques for memory-managed programming languages
- Funds used to provide one month of summer support for me
- Focused on submitting a National Science Foundation CAREER Grant on the dynamic storage reclamation and on writing an article for a referred conference

Professional Service and Activities

2005 – present	Reviewer	– Reviewed papers for journals, conferences, and workshops including: – Transactions on Programming Languages and Systems (TOPLAS), 2005 – 2007
2002 – 2005	Facilitator	– Target Hope Conference for Prospective Graduate Students Washington University
2001 – 2007	Web Developer	– Chancellors Graduate Fellowship Program Washington University
2000	Programming Judge	– Association for Computing Machinery High School Programming Contest Midwestern State University
2000 – present	Professional Memberships	– ACM, 2000 – present – SIGCSE, 2009–present

Institutional and Departmental Service

2009 – present	Member Admissions and Standing Committee	– Serving first term on the Institute Admissions and Standing Committee – Meet with students to hear appeals for readmission to the Institute and waiver of other academic regulations
2007–present	Academic Advisor	– Advising 24 undergraduates, including 16 freshmen in 2009 – 2010 school year
2009	Freshmen Information Session	– Worked with Matthew Boutell, Curtis Clifton, and Cary Laxer to organize session for freshmen interested in second majors or minors in Computer Science or Software Engineering
2007–present	Explore Engineering	– Work with Sriram Mohan to organize and conduct the <i>Programming in Python</i> component of the <i>Explore Engineering</i> program for high school and middle school students
2008	Presentation to Incoming Freshmen	– Worked with Sriram Mohan to give a College and Life Skills talk to incoming freshmen in the Fall term

**Other Committees and
Campus Service**

- Serve on the CSSE Teaching Assistant Assignment Committee, 2007–present
- Served on the Institute’s Laptop Committee, 2008
- Served on the Mission and Vision Adhoc Committee for the Computer Science Program, 2007–2008
- Served on the Computer Systems Task Force in the CSSE Department, 2008–2009
- Served on the International Requirements Task Force in the CSSE Department, 2008-2009

Other Information**Honors**

- Graduate Scholarship, Fall 2006 – Summer 2007
- Chancellor’s Graduate Fellowship, 2001 – 2006
- Best Paper Award, Sept. 2006
“Asymptotic Analysis for Real-Time Java Scoped-Memory Areas” presented at the 4th International Conference on Computing, Communications and Control Technologies (CCCT’06) in session: Computing Technologies
- United States Agency for International Development Fellowship, 2000 – 2001
- Outstanding Student in Computer Science, 2001
- Upsilon Pi Epsilon, International Honor Society for the Computing and Information Disciplines, 2001
- Who’s Who Among Students in American Universities and Colleges, 2000
- Outstanding Student in Computer Science, 2000
Caribbean Student Organization, Midwestern State University
- Alpha Chi National Honor Society, 1999

**Volunteer for Special
Olympics**

- Served as an escort for the Special Olympics events hosted at Indiana State University , 2009

**Volunteer with Northside
Church of Christ,
Terre Haute, Indiana**

- Congregational Song Leader, 2008 – present
- Preach occasionally, 2008 – present

**Volunteer with Ferguson
Heights Church of Christ,
Ferguson, Missouri**

- Congregational Song Leader, 2002 – 2007
- Education Ministry (developed and taught classes to teenagers and preteens), 2005 – 2007
- Yokefellow Ministry Leader, 2005 – 2006
- Chorus Member, 2002 – 2005

Web Sites Maintained

- www.rose-hulman.edu/~defoe

References

- Available upon request