Professional Activity Report with Self Evaluation (PARSE) and Documentation

Academic Year 2015-2016

Submitted to Instructional Staff Relations in the office of Faculty Staff Relations (OFSR)

Written by

Raffi Khatchadourian, Assistant Professor

Department of Computer Systems Technology

June 1, 2015

PARSE with documentation is on this labeled archival disk presented in a sheet protector for placement in my file.

signature:_____

New York City College of Technology

OF THE CITY UNIVERSITY OF NEW YORK

Professional Activity Report and Self-Evaluation

The Professional Activity Report and Self-Evaluation (PARSE) provides a convenient and comprehensive way for faculty members to prepare a record of their work and accomplishments in light of their overall goals. Faculty members should update the report each year, adding that year's information. The report should be submitted to the department chair (Chair) in preparation for the annual evaluation.

- See "Guidelines for Faculty Personnel Process" for a detailed discussion of the PARSE and guidance in preparing it (Sections I and III).
- Untenured faculty members should prepare the PARSE with the year's Professional Development Plan in mind, indicating how and how well the plan was fulfilled and where relevant, proposing modifications.
- Keep in mind that although all faculty members are expected to meet the expectations set down by the University Board of Trustees, there are disciplinary and professional differences among the ways that faculty contribute to knowledge and improved practice in their fields. Although every effort has been made to make the categories and examples listed comprehensive, they are not inclusive.
- A signed copy of the PARSE should be submitted on an archival disk to the Office of Instructional Staff Relations (ISR) along with the annual evaluation usually via the Chair and school dean (Dean). Candidates for promotion should follow directions in the annual memo issued by ISR.
- Each item noted in the PARSE must be supported by documentation submitted to the ISR for the faculty member's file before the file is closed.

Table of Contents

BACKGROUND

1. **Date:** 2/15/2015
2. **Name:** Raffi Khatchadourian
3. **Department:** Computer Systems Technology
4. **Date of first NYCCT appointment on tenure bearing line:** August 27, 2014
5. **Present Rank:** Assistant Professor **5A. Effective Date of Present Rank:** August 27, 2014

6. **Bachelor's Degree/Year:** Bachelor of Science in Computer Science, 2004
7. **Master's Degree/Year:** Master of Science in Computer Science, 2010
8. **Thesis Title:** No masters thesis as I was on a direct-PhD program.
9. **Doctorate Institution/Year:** Ohio State University, 2011
10. **Dissertation Title:** Techniques for Automated Software Evolution
11. **Progress toward doctorate (if not completed), Institution/Date Expected:**
12. **Doctoral Dissertation Advisor or Sponsor:** Dr. Neelam Soundarajan
13. **Basis for Doctoral Equivalent if relevant:**
14. **Professional licenses or certifications:** none
15. **Summary of Previous Employment (list in reverse chronological order):**
    a. June 2006–March 2011. Apple Inc., Cupertino, CA, Software Engineer.
    Software Engineer in Digital Rights Management (DRM) (June 2012 – August 2014). Security and content protection for iTunes, iTunes store, iBooks, and App store. Performance analysis and tuning of server-side iTunes store operations and client-side transactions. Secure content key and credentials management and concurrency features for client-side iTunes. Design, development, and documentation of secure purchase receipt/certification for content purchased in Mac OS X and iOS app stores. Fraud prevention.
    Software Engineer in Hardware Test Engineering for iPhone, iPad, and iPod Engineering (April 2011–May 2012). Designed, implemented, and maintained software in Python and Objective-C for automated hardware testing of mobile devices. Devised test plans and architected distributed hardware test software. Performed peer code reviews, mentored team members, and lead weekly software discussion meetings. Implemented factory test automation process control and data analysis software.
    b. August 2005–March 2011. Ohio State University, Graduate Teaching Associate Lecturer.
    Courses taught: Introduction to Programming and Algorithms for Engineers and Scientists (CS&E 202), Introduction to C++ Programming (CS&E 230). Lecturing, lesson planning, lab instruction, exam design, online course content administration, weekly office hours, instructional video and audio production. 2010 Outstanding Departmental Graduate Student Teaching (Eleanor Quinlan Memorial) Award.
    c. June 2010–September 2010. University of Tokyo, Japan, Visiting Researcher: Programming Principles and Practices (PPP) Group, Department of Graphics and Computer Science, Supervisor: H. Masuhara. Program change prediction and code completion techniques for Aspect-Oriented software in the context of Integrated Development Environments (IDEs).
    d. June 2009–September 2009. Ohio State University, Graduate Research Associate: Program Analysis and Testing of Object-Oriented Software (PRESTO) Group, Department of Computer Science & Engineering, Advisor: A. Rountev. Summary-based, intra-procedural points-to analysis for Java programs. Augmented the Soot Java byte-code analysis and optimization framework (see

sable.mcgill.ca/soot) to support summary-based (cached) byte-code analysis for increased performance of common analyzes, such as points-to analysis, involving reusable software libraries and frameworks.

e. January 2008–September 2008. Lancaster University, UK, Visiting Graduate Research Associate: Aspect-Oriented Software Engineering Group, Computing Department, Supervisor: A. Rashid, Mentor: P. Greenwood. Traceability in Aspect-Oriented (AO) analysis and design. Software artifact traceability to support automated source code evolution of AO software, enabling developers to correctly maintain AO software as requirements are altered.

f. May 2007–September 2007. Bell Laboratories, Alcatel-Lucent, Murray Hill, NJ, Research Intern, Supervisor: R. Hull, Mentor: K. Namjoshi. Program language design for shared experience, multi-media, multi-protocol, event-driven applications. Novel Application Programmer Interface (API) based on hierarchical finite automata and a research prototype implementation.

g. September 2006–December 2006. Ohio State University, Graduate Research Associate: EASE Laboratory, Department of Electrical & Computer Engineering, Advisor: F. Khan. Developed new ECE/CSE 668 course to model a Challenge-X hybrid SUV automobile in a component-based software architecture.

h. February 2004–September 2005. New Jersey Office of Information Technology, Trenton, NJ, Software Development Specialist. Developed J2EE architecture and infrastructure for the New Jersey Insurance Surcharge System, a multi-level client, high-volume transactional system. Created object-oriented design and stored procedures in an Oracle RDBMS.

i. June 2003–February 2004. Integrated Medical Care, Toms River, NJ, UNIX Systems Administrator. Created and administered network devoted to web authoring. Administered and configured local web servers, Java application containers, source code repository, RDBMS (MySQL), and windows clients using samba.

TEACHING

See "Guidelines for Faculty Personnel Process" section III.B.1.

16. List all courses taught at New York City College of Technology (course code and title):
    - CST 2301: Multimedia and Mobile Device Programming.
    - CST 1201: Programming Fundamentals
    - CST 1101: Problem Solving with Computer Programming

17. List other teaching/instructional responsibilities.
    - Curriculum development and assessment
        - 2015-2016 Academic Year
            - Applied for Open Educational Resources (OER) Fellowship, Spring 2016.
        - 2014-2015 Academic Year
            - Served on the CST assessment committee.
                - Explored learning outcomes of similar programs.
                - Proposed a draft of learning outcomes for our CST program.

- Undergraduate research supervision
  - 2015-2016 Academic Year
    - Mentored Olivia Moore during the Louis Stokes Alliances for Minority Participation (LSAMP) Undergraduate Research program.
      - Met with Olivia weekly to assign research tasks and discuss status updates.
      - Assisted Olivia with her progress reporting to the LSAMP program.
  - 2014-2015 Academic Year
    - Submitted an application for the Emerging Scholars Spring 2015 program with Egor Kozitski.
      - Met with Egor to discuss his goals and my current research.
      - Proposed a project, which is currently under consideration by the program.
- Formal academic advisement
  - Learned department curriculum and degree requirements.
  - Advised students throughout the middle portion of the Fall 2014 semester into the Spring 2015 semester.
  - Participated in mid-semester CST department open advising.
- College-wide programs (e.g. College Now, Learning Communities)
  - None currently.
- Teaching outside City Tech—including teaching at the CUNY Graduate Center, CUNY School of Professional Studies Online Degree Program, visiting appointments, etc.)
  - None currently.
- Theses or Dissertations Supervised (include topic/title, name of student and expected date of completion or date of completion)
  - None currently.
- Other (Explain)
  - None currently.

SCHOLARLY AND PROFESSIONAL GROWTH

It is the faculty member's responsibility to ensure that copies of all publications and presentations and evidence of all professional work have been placed in the file in ISR before the file is closed. No item can be considered without verification. See "Guidelines" sections I.B.3. and III.C.

Within categories, list examples in reverse chronological order (Use standard citation format, preferably APA, MLA, or Turabian) [1]

18. **Publication and Production:** Please consult the "***Guidelines for Faculty Personnel Process" section I.B.3.*** for a list of the types of work that qualify as publications and productions. Examples should be divided and clearly labeled as to type (e.g. Peer-Reviewed Scholarly Books, Peer-Reviewed Articles, Peer-Reviewed Exhibitions, Patents, Conference Papers, etc.). Section 18 is to be divided into two parts:

- Conference Publications (peer-reviewed)
  - Academic Year 2015-2016
    - Khatchadourian, R. (2015). Towards a Cloud-based Java IDE for Teaching Minorities. Rejected from the 2015 CUNY IT Conference.
  - Academic Year 2014-2015
    - Khatchadourian, R., Rashid, A., Masuhara, H., and Watanabe, T. (2015). Detecting broken pointcuts using structural commonality and degree of interest. To appear in the International Conference on Automated Software Engineering, ASE 2015, New York, NY, USA. ACM. (77/326; 23.6% acceptance rate).

[1] Reviews or citations of one's work may be noted, both in the self-evaluation part of the PARSE and, if desired, in an addendum to the PARSE called Citations.

        - Khatchadourian, R., Rashid, A., Masuhara, H., and Watanabe, T. (2015). Detecting broken pointcuts using structural commonality and degree of interest. Rejected from the International Symposium on Software Testing and Analysis, ISSTA 2015, New York, NY, USA. ACM.
        - Soundarajan, N., Bronish, D., and Khatchadourian, R. (2011). Formalizing reusable aspect-oriented concurrency control. In Proceedings of the 23rd International Conference on Software Engineering & Knowledge Engineering (SEKE '11), pages 111–114. Knowledge Systems Institute Graduate School.
        - Khatchadourian, R., Greenwood, P., Rashid, A., and Xu, G. (2009). Pointcut rejuvenation: Recovering pointcut expressions in evolving aspect-oriented software. In Proceedings of the 24th International Conference on Automated Software Engineering (ASE '09), pages 575–579, Auckland, New Zealand. IEEE/ACM. (38+33/222; 32% acceptance rate).
        - Khatchadourian, R., Sawin, J., and Rountev, A. (2007). Automated refactoring of legacy Java software to enumerated types. In Proceedings of the 23rd International Conference on Software Maintenance (ICSM '07), pages 224–233, Paris, France. IEEE. (46/214; 21% acceptance rate).
        - Soundarajan, N., Khatchadourian, R., and Dovland, J. (2007). Reasoning about the behavior of aspect-oriented programs. In Smith, J., editor, Proceedings of the 11th IASTED International Conference on Software Engineering and Applications (SEA '07), Cambridge, MA, USA. ACTA Press.
- Journal Publications (peer-reviewed)
    - Khatchadourian, R., Greenwood, P., Rashid, A., and Xu, G. (2012). Pointcut rejuvenation: Recovering pointcut expressions in evolving aspect-oriented software. IEEE Transactions on Software Engineering (TSE), 38(3):642– 657.
- Workshop Publications (peer-reviewed)
    - Greenwood, P., Rashid, A., and Khatchadourian, R. (2009). Contributing factors to pointcut fragility. In Proceedings of the 3rd International Workshop on Assessment of Contemporary Modularization Techniques (ACoM '09) at the 24th ACM SIGPLAN International Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA '09), pages 19–24, Orlando, Florida, USA. ACM.
    - Soundarajan, N. and Khatchadourian, R. (2009). Specifying reusable aspects. In Proceedings of the 5th Asian Workshop on Aspect-Oriented and Modular Software Development (AOAsia '09) at the 24th International Conference on Automated Software Engineering (ASE '09), Auckland, New Zealand.
    - Khatchadourian, R., Dovland, J., and Soundarajan, N. (2008a). Enforcing behavioral constraints in evolving aspect-oriented programs. In Proceedings of the 7th International Workshop on Foundations of Aspect-Oriented Languages (FOAL '08) at the 7th International Conference on Aspect-Oriented Software Development (AOSD '08), pages 19–28, Brussels, Belgium. ACM.
    - Khatchadourian, R., Greenwood, P., and Rashid, A. (2008b). On the assessment of pointcut design in evolving aspect-oriented software. In Proceedings of the 2nd International Workshop on Assessment of Contemporary Modularization Techniques (ACoM '08) at the 23rd ACM SIGPLAN International Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA '08), pages 9–10, Nashville, Tennessee, USA. Lancaster University, ACM.
    - Khatchadourian, R. and Soundarajan, N. (2007). Rely-guarantee approach to reasoning about aspect-oriented programs. In Proceedings of the 5th International Workshop on Software Engineering Properties of Languages and Aspect Technologies (SPLAT '07) at the 6th International Conference on Aspect-Oriented Software Development (AOSD '07), Vancouver, British Columbia, Canada. ACM.
- Tool Demonstrations (peer-reviewed)
    - Khatchadourian, R., Rashid, A., Masuhara, H., and Watanabe, T. (2015). Fraglight: Shedding light on broken pointcuts in evolving aspect-oriented software. In companion publication of the 2015 ACM SIGPLAN conference on Systems, Programming, and Applications: Software for Humanity. SPLASH '15, New York, NY, USA. ACM.

- Khatchadourian, R. and Muskalla, B. (2010). Enumeration refactoring: A tool for automatically converting java constants to enumerated types. In Proceedings of the 25th International Conference on Automated Software Engineering (ASE '10), pages 181–182, Antwerp, Belgium. IEEE/ACM. (18/45; 40% tool demonstration acceptance rate).
- Khatchadourian, R. and Rashid, A. (2008). Rejuvenate pointcut: A tool for pointcut expression recovery in evolving aspect-oriented software. In Proceedings of the 8th International Working Conference on Source Code Analysis and Manipulation (SCAM '08), pages 261–262, Beijing, China. IEEE.

- Posters (peer-reviewed)
  - Arefin, M. and Khatchadourian, R. (2015). Porting the netbeans java 8 enhanced for loop lambda expression refactoring to eclipse. In companion publication of the 2015 ACM SIGPLAN conference on Systems, Programming, and Applications: Software for Humanity. SPLASH '15, New York, NY, USA. ACM.
- Technical Reports
  - Khatchadourian, R., Greenwood, P., Rashid, A., and Xu, G. (2008). Pointcut rejuvenation: Recovering pointcut expressions in evolving aspect-oriented software. Technical Report COMP-001-2008, Revised March 2009, May 2009, Lancaster University, Lancaster, UK.
  - Khatchadourian, R., Sawin, J., and Rountev, A. (2007). Automated refactoring of legacy Java software to enumerated types. Technical Report OSU-CISRC-4/07-TR26, Ohio State University.
- Project Deliverables
  - Khatchadourian, R., Chitchyan, R., Greenwood, P., Rashid, A., Valenzuela, J. A., Fernández, L. M., Pinto, M., Fuentes, L., Jackson, A., and Clarke, S. (2008). Overall aspect-oriented analysis and design approach. Technical Report AOSD-Europe Deliverable D132, AOSD-Europe-ULANC-49, European Network of Excellence on Aspect- Oriented Software Development.
  - Pinto, M., Fuentes, L., Chitchyan, R., Rashid, A., Jackson, A., Clarke, S., Shishkov, B., Tekinerdogan, B., Aksit, M., Greenwood, P., and Khatchadourian, R. (2008). Traceability framework: From requirements through architecture and design. Technical Report AOSD-Europe Deliverable D126, AOSD-Europe-ULANC-43, European Network of Excellence on Aspect-Oriented Software Development.
  - Rashid, S. O., Chitchyan, R., Rashid, A., Khatchadourian, R., and Greenwood, P. (2008). Approach for change impact analysis of aspectual requirements. Technical Report AOSD-Europe Deliverable D110, AOSD-Europe-ULANC-40, European Network of Excellence on Aspect-Oriented Software Development.
  - Rashid, S. O., Chitchyan, R., Rashid, A., Khatchadourian, R., and Greenwood, P. (2008). Approach for change impact analysis of aspectual requirements. Technical Report AOSD-Europe Deliverable D110, AOSD-Europe-ULANC-40, European Network of Excellence on Aspect-Oriented Software Development.
- Theses
  - Khatchadourian, R. (2011). Techniques for Automated Software Evolution. PhD thesis, Ohio State University, 247 University Hall, 230 North Oval Mall, Columbus, OH, USA 43210.
- Patents
  - Fasoli, G., Farrugia, A., Govind, A., and Khatchadourian, R. (2014). Controlling use of shared content items based on client device. U.S. Patent Application (pending). Serial No.: 62/027,117. Docket Number: 8802.458.PZUS00_P24313USP1. Apple Patent No.: P24313USP1.
- Open Source Software
  - fraglight (2011-). AspectJ source code inferencing plug-in for the Eclipse open source Integrated Development Environment, providing tool support for early detection of broken pointcuts in evolving Aspect-Oriented software. Integrated with the Mylyn task focusing plug-in for Eclipse.
  - Rejuvenate Pointcut (2008-). AspectJ source code inferencing plug-in for the Eclipse open source Integrated Development Environment, providing tool support for pointcut expression recovery in evolving Aspect-Oriented software.
  - Convert Constants to Enum (2007-). Java source code refactoring plug-in for the Eclipse open source Integrated Development Environment. Planned for release in the standard distribution of Eclipse.

18 A. In this part, candidates for **promotion** should list only those publications or examples of production **since** their last promotion. Candidates for **tenure and reappointment** should list only those publications or examples of production released **since** their appointment to the tenure track at New York City College of Technology.

18 B. In this part, candidates for **promotion** should list only those publications or examples of production released **prior** to their last promotion. Candidates for **tenure and reappointment** should list only those publications or examples of production released **prior** to their appointment to the tenure track at New York City College of Technology.

19. **Works in Progress** (indicate stage of development; include in the file documentation of completed works under consideration for publication, shows, etc.):

- Khatchadourian, R., Arefin, M., Moore, O., and Masuhara, M. Towards Automatic Migration of Legacy Java Method Implementations to Interfaces. Submitted to the 2015 IBM Programming Languages Day. Paper submission confirmation.

20**. Honors, Prizes, and Awards**

- 2010. Ohio State University Department of Computer Science & Engineering Graduate Teaching (Eleanor Quinlan Memorial) Award Recipient ($500 US).
- 2010. Ohio State University Graduate Associate Teaching Award Nominee.
- 2004. Monmouth University Outstanding Undergraduate Computer Science Student Award Recipient.

21. **Grant Activity** (indicate funding agency and collaborators; if awarded, provide grant number, amount, and duration. For collaborative grants, indicate amount earmarked for NYCCT)

- Academic Year 2015-2016
  - 2015. ACM SIGPLAN Professional Activities Committee (PAC) Travel Grant Recipient ($879 US). Award confirmation.
  - 2015. Applied for the CUNY Diversity Projects Development Fund (DPDF) as sole investigator. Application confirmation.
  - 2015. Applied for NSF Computer and Information Science and Engineering (CISE) Research Initiation Initiative (CRII) as sole investigator. Application confirmation.
  - 2015. Applied for a 2015 IVY Innovator Award.
  - 2015. Applied for NSF Research Experiences for Undergraduates (REU) as senior personnel. Collaborators include XiangDong Li and Ashwin Satyanarayana.
- Academic Year 2014-2015
  - 2015. Applied for the Google Faculty Research Award (113/805; 14% acceptance rate). Application confirmation.
  - 2015. Applied for the 2015 UCLA Summer Institute on Mobile Health Technology Research. Application confirmation.
  - 2015. Tokyo Institute of Technology Research Abroad and Invitational Program for the Promotion of International Joint Research (¥328,480). Award notification email.
  - February 2015. Applied for United States-Japan Society for the Promotion of Science (US-JSPS) Fellows Alumni Association BRIDGE Fellowship.
  - 2014. Applied for PSC-CUNY Traditional B grant.
  - 2010. Japan Society for the Promotion of Science (JSPS) Summer Program Fellowship Recipient (¥692,500). Grant No. SP10024.
  - 2010. National Science Foundation (NSF) East Asia and Pacific Summer Institutes (EAPSI) Award Recipient ($5,000 US). Grant No. OISE-1015773.
  - 2009,2010. ACM SIGSOFT CAPS Program Travel Grant Recipient ($2,300 US).
  - 2008,2009. Lancaster University Faculty of Science & Technology Travel Grant Recipient (£300).
  - 2007,2008(2),2009. ACM SIGPLAN Professional Activities Committee (PAC) Travel Grant Recipient ($1,142 US).

- 2008. European Network of Excellence on Aspect-Oriented Software Development Student Grant Recipient (e300).
- 2007. Visiting Studentship in Aspect-Oriented Software Analysis and Design, Computing Department, Lancaster University, UK (£8,000).

SERVICE

See "Guidelines" section III.D. Please note where compensation or release from teaching has been provided. All service is evaluated primarily according to the quality and results of the contribution; however, expectations may differ depending upon whether or not compensation or time has been provided to support the service.

22. **Administrative Assignments (Include dates)**
- None currently.

23. **Other Department/College/University Service, including Continuing Education** (list by category; for committee work, include the name of the committee chair)
- Departmental Service
  - 2015-2016 Academic Yera
    - Attended Fall 2015 Open House.
      - Gave several lectures on CST department, degrees, and courses.
      - Answered parents' and students' questions regarding curriculum.
      - Introduced potential students to OpenLab.
  - 2014-2015 Academic Year
    - 2015. Helped coordinate a CST department mobile app made by students.
    - 2015. Interviewer, Computer Information Association, Department of Computer Systems Technology, New York City College of Technology, City University of New York, Brooklyn, NY. Participated as an interviewer for a mock interview event sponsored by the student-organized computer club. This event is used to help students prepare for internship and full-time position interviews. Asked various coding and other software-related questions.
    - 2014–. Member, Colloquium Committee, Department of Computer Systems Technology, New York City College of Technology, City University of New York, Brooklyn, NY, Chair: Marcos Pinto. Talent discovery, event hosting, organization, outreach, and promotion, and website creation and maintenance.
    - 2014–. Member, Assessment Committee, Department of Computer Systems Technology, New York City College of Technology, City University of New York, Brooklyn, NY, Chair: Ashwin Satyanarayana. Learning objectives creation and analysis.
    - 2014–. Member, Recruitment Committee, Department of Computer Systems Technology, New York City College of Technology, City University of New York, Brooklyn, NY, Chair: Fangyang Shen. Open house preparation and presentations, communication with prospective students, and freshman orientation.
    - 2014. Assisted with finding new faculty by promoting an Assistant Professor job posting on several software-related mailing lists, as well as distribution to colleagues at other universities.
    - 2011. Member, Annual Awards Selection Committee, Department of Computer Science & Engineering, Ohio State University, Columbus, OH. Applicant review, voting, and discussion.
- Collegiate Service
  - 2015-2016 Academic Year
    - 2015. Panelist, New York City College of Technology, City University of New York, Brooklyn, NY, Facilitator: Cailean Cooney. "Using Open Educational Resources (OER) in the Classroom: a Panel Discussion." A City Tech faculty panel discussion about integrating

open educational resources (OER) into the classroom. Discussed my use of MIT Open Courseware and GitHub in the classroom.
        - 2015. Usability Study Participant, OpenLab, New York City College of Technology, City University of New York, New York, NY, Administrator: Patrick Corbett. Answered questions about professional and pedagogical use of the OpenLab academic collaborative website.
    - 2014-2015 Academic Year
        - 2015. Judge for Undergraduate Research Poster session. Thank you letter from Prof. Janet Liou-Mark.
        - 2015. Helped NYCCT find CST students to work on a crowd funding web application. Helped evaluate commercial proposals. Thank you email from Stephen Soiffer.
        - 2015. Judge, City University of New York, New York, NY. New York City Science & Engineering Fair (NYCSEF) 2015 Final Round.
        - 2015. Judge, City University of New York, New York, NY. New York City Science & Engineering Fair (NYCSEF) 2015 Preliminary Round.
        - 2015. Panelist, New York City Advancing Computer Science Careers through Enhanced Networking and Training (NYC ASCENT), New York, NY. "Academia or Industry?" Panel and Networking event at the New York University Polytechnic School of Engineering (NYU poly) Urban Future Lab. Discussed previous career experiences and decisions with post doctoral researchers and graduate students in the New York City area.
        - 2014. Faculty Judge, New York City College of Technology, City University of New York, Brooklyn, NY. 8th Annual Public Speaking Competition.
        - 2011. Member (Web Chair), Organizing committee for the European Conference on Object-Oriented Programming (ECOOP), Lancaster, UK. Website creation and maintenance, event and social media coordination, event promotion.
- University Service
    - Academic Year 2015-2016
        - 2015–. Member, CUNY Academic Commons Subcommittee, City University of New York, New York, NY, Chair: Matthew Gold. Attend monthly meetings regarding Academic Commons website status and growth, Academic Commons website bug reporting.
        - 2015–. Alternate, Committee on Academic Technology (CAT), City University of New York, New York, NY, Chair: George Otte. Attend monthly meetings regarding various facets of academic technology at CUNY, including instructional technology.
        - 2015. Usability Study Participant, Academic Commons, City University of New York, New York, NY, Administrator: Samantha Raddatz. Answered questions about and participated in usability experiments for the CUNY Academic Commons collaborative website.
        - 2015. Presenter, National Science Foundation (NSF)/Department of Defense (DoD) Research Experience for Undergraduates (REU) at College of Staten Island (CSI), City University of New York (CUNY): Computational Methods in High Performance Computing with Applications to Computer Science, PI: Louis Petingi, Co-PI: Xiaowen Zhang. Presentation on "Automatic Migration of Legacy Java Method Implementations to Interfaces."

24. **Professional Activities and Recognition** (e.g., state and national certification/ licensing bodies, service on accrediting bodies, offices in professional organizations)

- 2015-2015 Academic Year
    - 2016. Program Committee member for the symposium on Software Engineering Technology and Applications (SETA) of the 40th IEEE Computer Society International Conference on Computers, Software & Applications (COMPSAC'16). Invitation email.
    - 2016. Organizer for the 2016 International Workshop on Language Modularity (LaMod'16) of the 15th International Conference on Modularity (MODULARITY'16).
    - 2016. Program Committee member for the Tool Demonstration and Poster Session tracks of the 15th International Conference on Modularity (MODULARITY'16).

- 2016. National Science Foundation (NSF) Graduate Research Fellowship Program (GRFP) Panelist Pool member.
- 2015. Representative for the Eclipse Foundation at the 2015 Google Summer of Code (GSoC) Mentor Summit.
- 2015. Faculty mentor for the Emerging Scholars Undergraduate Research program, Fall 2015 (1 student).
- 2015–2016. Faculty mentor for the Louis Stokes Alliances for Minority Participation (LSAMP) Undergraduate Research program.
- 2015. Visiting Scholar at Security Lancaster, School of Computing and Communications, Lancaster University, Lancaster, United Kingdom.
- 2015. Visiting Scholar at the Programming Research Group, Department of Mathematical and Computing Sciences, Tokyo Institute of Technology, Tokyo, Japan.
- 2015. Google Summer of Code Project Mentor for two Eclipse projects, namely, Convert to a lambda expression Java 8 refactoring/quick fixes, and JDT UI: Adding New Refactoring Features and Improving Code Completion.

- 2014-2015 Academic Year
  - 2015. Faculty mentor for the Emerging Scholars Undergraduate Research program, Spring 2015 (1 student).
- Pre-2014
  - 2011–2013. Web maintainer for the Aspect-Oriented Software Development research website.
  - 2010. Student volunteer at the ACM SIGPLAN/SIGSOFT International Conference on Systems, Programming, Languages, and Applications (SPLASH, formerly OOPSLA), Reno, Nevada, USA.
  - 2009,2010. Google Summer of Code Proposed Project Mentor.
  - 2008,2009,2010. Secondary reviewer for the IEEE/ACM International Conference on Automated Software Engineering (ASE).
  - 2008,2009,2010. Secondary reviewer for the European Conference on Object-Oriented Programming (ECOOP).
  - 2009,2010. Secondary reviewer for the International Conference on Aspect-Oriented Software Development (AOSD).
  - 2007,2009. Student volunteer at the International Conference on Aspect-Oriented Software Development (AOSD), Vancouver, BC, Canada (2007), Charlottesville, VA, USA (2009).
  - 2007,2009. Spring school participant at the International Conference of Aspect-Oriented Software Development (AOSD), Vancouver, BC, Canada (2007), Charlottesville, VA, USA (2009).
  - 2008. Secondary reviewer for the 2nd Workshop on Assessment of Contemporary Modularization Tech- niques (ACoM) at the 23rd ACM SIGPLAN International Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA).
  - 2007. Textbook reviewer for "Programming with C++ Brief Edition, " D.S. Malik, Cengage Learning, Boston, MA.
  - 2007. Participant at the 2nd European Summer School on Aspect-Oriented Software Development, Genoa, Italy.
  - 2007. Program committee member for the 2nd Ohio Graduate Student Symposium on Computer and Information Science & Engineering (OGSS-CISE).
  - 2007. Secondary reviewer for the 29th International Conference on Software Engineering (ICSE).
  - 2004. President and re-establisher, Monmouth University ACM Student Chapter.

25**. List any other activities considered relevant, including participation in continuing professional education and community service.**

- Academic Year 2015-2016
  - November 2015.IEEE/ACM International Conference on Automated Software Engineering, ASE '15, Lincoln, NE. Presentation on "Detecting Broken Pointcuts using Structural Commonality and Degree of Interest."
  - October 2015. ACM SIGPLAN Conference on Systems, Programming, and Applications: Software for Humanity, SPLASH '15, Pittsburgh, PA. Demonstration on "Fraglight: Shedding Light on Broken Pointcuts in Evolving Aspect-Oriented Software."

- October 20, 2015. Attended iTEC: Instructional Videos Made Simple. Reminder email.
- September 2015. NYC Media Lab 2015 Annual Summit, New York City Media Laboratory, NYU Skirball Center for the Performing Arts, 566 LaGuardia Place, New York, NY 10012. Demonstration on "Fraglight: Shedding Light on Broken Pointcuts in Evolving Aspect-Oriented Software."
- September 2015. Razorfish Global Technology Summit, New York, NY. Demonstration on "Fraglight: Shedding Light on Broken Pointcuts in Evolving Aspect-Oriented Software." Invitation.
- June 2015. Core Software Group, Department of Creative Informatics, Graduate School of Information Science and Technology, The University of Tokyo, Tokyo, Japan. Presentation on preliminary research on Java 8 refactoring.
- June 2015. Programming Research Group, Department of Mathematical and Computing Sciences, Graduate School of Information Science and Engineering, Tokyo Institute of Technology, Tokyo, Japan. Presentation on "Open Problems in Automatically Refactoring Legacy Java Software to use New Features in Java 8."

- Academic Year 2014-2015
  - May 1, 2015. Spoke about current research at the 2015 City Tech Research Conference.
  - April 24, 2015. Attended CUNY Computer Science Discipline Council Fall 2015 meeting.
  - March 5, 2015. Attended Tech-U-Cation: The Integration of Tech and Education in the Classroom and Beyond.
  - March 4, 2015. Attended STEAM: Putting the Arts Back in STEM.
  - February 10, 2015. Attended OneSearch library workshop.
  - February 10, 2015. Attended Writing Across the Curriculum (WAC) "Better Note Taking, Better Grades" workshop.
  - December 2014–January 2015. Technology Volunteer, Learning Disabilities Association, New York, NY. Assisted with technology needs during organization close-down.
  - January 29, 2015. Attended Writing Across the Curriculum (WAC) meeting. Discussed possible conversion of CST course to WI.
  - January 5, 2015. Attended Blackboard Upgrade workshop.
  - December 12, 2014. Attended CUNY Computer Science Discipline Council Fall 2014 meeting.
  - December 11, 2014. Attended Undergraduate Research committee meeting.
  - December 9, 2014. Attended *Futures Initiative* meeting at CUNY Graduate Center. Currently exploring collaboration.
  - December 9, 2014. Attended Writing Across the Curriculum (WAC) workshop.
  - December 3, 2014. Attended Undergraduate Research Mixer.
  - November 2014. Reviewed and provided feedback for Ashwin Satyanarayana's paper, "Learning by Visualization and Simulation."
  - November 18, 2014. Attended Scholars Exchange: Professor Christopher Swift presents Theaters of Absence: Seville, 1248-1550.
  - November 11, 2014. Attended Writing Across the Curriculum (WAC) "Avoiding Plagiarism" workshop.
  - October 31, 2014. Attended "COLLOQUIUM 1.2: NEW YORK CITY COLLEGE OF TECHNOLOGY (Design Incubation)"
  - October 28, 2014. Attended "Scholars Exchange: Professor Jill Belli presents Pedagogies of Happiness: What Self-Help, Positive Psychology, and Positive Education Teach about Well-Being".
  - October 14, 2014. Attended Writing Across the Curriculum (WAC) "Effective Grading and Minimal Marking" workshop.
  - October 28, 2014. Attended College Council General Meeting.
  - October 9, 2014. Attended Math Seminar: Trends and Trades.
  - October 8, 2014. Attended Applying for a PSC-CUNY Research Award Workshop.

SELF-EVALUATION

26. **Self-evaluation**:

In a succinct but complete narrative, (normally limited to three pages or fewer, single-spaced) candidates should assess their teaching, scholarly and professional growth, and service and should explain how their

activities in these areas contribute to the success of their department and New York City College of Technology. The self-evaluation provides candidates an opportunity to reflect on the values, philosophy, and intellectual interests that inform their teaching and scholarship. (See the ***Guidelines for Faculty Personnel Process*****, Section I.B.4.** for further guidance.)

In this assessment, I will discuss my teaching, scholarly and professional growth, and collegiate service, and their contributions to the success of my department and college. I arrived at City Tech following a four year tenure in private industry following graduate school. As such, it was difficult to re-adjust to academic life, including teaching duties. Industry is very different than academia in a plethora of ways. Furthermore, my teaching experience at Ohio State University was quite different from City Tech in terms of student body, facility, and teaching materials. It took some time to get used to my students, as well as for students to get used to me. I have quite a different teaching style, it seems, than other professors in the department.

My best class was my CST 2301 course this past Spring semester, where we studied mobile computing. The students really enjoyed the topics and working together on their final projects. We also had a guest speaker, as well as visited events from the Brooklyn Tech Triangle. This made for a very interactive experience with the students. Students were very interested in mobile computing, especially from an entrepreneur standpoint. In the future, I hope to improve my teaching in this course by finding more creative intermediate assignments for students to complete prior to their final project. Or, I may develop milestones of their final project as assignments. The assignments we had, although beneficial, were a little dry in context.

My worst experience was my CST 1201 course this past Spring semester. Students were quite disinterested in the topics discussed. For the first time in my experience, I administered pop quizzes due to the lack of reading being done by the students. Many students struggled mightily in this course. I felt that I did a good job presenting the proper material to the students, as well as sound assignments. However, many of the students utilized the CST department tutors for their assignments and, I believe, that the tutors did most of the work for them as the majority of their answers were similar. As such, many students did poorly on the final exam.

As for improvement in my teaching style for this course, I plan to simplify the software development tool set I use to teach the students and administer the class. Also, I plan to use less slides and more board work to convey ideas more clearly.

In my first year, I completed a partially written chapter of my PhD thesis that was previously unpublished. The manuscript is currently in review at a top, peer-reviewed Software Engineering conference. I also explored a new research area pertaining to new Java software development kits, and I plan to explore and further this field is the near future. I will bring the new material learned from this research into my classroom as it directly relates to my courses taught. Furthermore, I plan to collaborate with other CUNY professors next year.

As for service, my main departmental service focus was reviving our department colloquium series. Although it took many weeks, the popularity of the series is impressive among students and faculty. This helps to expose them to new technologies. In the future, I hope to bring a wider variety of speakers from outside the college to speak at our colloquiums. As for collegiate service, I volunteered for as many activities as possible. I hope that my expertise has helped the students further their projects.I particularly enjoyed the judging activities. Also, I attended several undergraduate research meetings. I plan to explore this committee more fully in the future.

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(Signature)

NOTE:

- Candidates for **reappointment** should supply a cumulative evaluation of their work, beginning with a focus on the immediately preceding year, followed by a summary of prior years.
- Candidates for **tenure** should evaluate their work since their initial appointment.
- Candidates for **promotion** should evaluate their work since their last promotion.
- Candidates for tenure, certificate of continuous employment, or promotion should complete and attach a copy of their **Curriculum Vitae.**

Adopted by the College Personnel & Budget Committee, 22 April 2010