

FRANCISCO SERVANT

<http://www.fservant.com> | fservant@uma.es

RESEARCH INTERESTS

My research focuses on **software development productivity** and **software quality**. I provide practical solutions to real-world software-engineering problems through empirical software engineering (quantitative and qualitative), software analytics, mining software repositories, automation, and software comprehension.

EXPERIENCE

University of Málaga, Spain Assistant Professor Research in Software Engineering	August 2022 – Present
Universidad Rey Juan Carlos, Madrid, Spain Distinguished Researcher Research in Software Engineering	Nov 2021 – July 2022
Virginia Polytechnic Institute and State University, Blacksburg, VA Assistant Professor Research in Software Engineering	August 2015 – Oct. 2021
University of California, Irvine, CA Graduate Research Assistant I performed research in software development productivity, mining software repositories, program analysis, and computer-supported collaborative work.	March 2008 – June 2015
Microsoft Research, Redmond, WA Research Intern I performed research to mitigate the complexity of branching within the development process, and I implemented a tool to report my findings.	June 2011 – Sept. 2011
DreamWorks Animation, Glendale, CA Research & Development Intern I surveyed developers to study how they used the internal revision-control system. I also designed new architectures, performed bug fixes, added test cases, and implemented new features for it.	June 2008 – Sept. 2008
Microsoft Corporation, Madrid, Spain SQL Server Development Support Engineer I provided reactive support for administration and development of SQL Server for European customers by phone, email, and on-site. I frequently resolved critical situations with direct impact on the customer's business.	July 2005 – July 2007
Valeo Lighting Systems, Martos, Spain Software Engineer Intern I designed and implemented an automated technical support system, deployed cryptography infrastructure (PGP), and performed technical support tasks for Microsoft software.	Aug. 2004 – Oct. 2004

EDUCATION

Ph.D. in Software Engineering University of California, Irvine Advisor: James A. Jones Dissertation Title: “ <i>A Characterization and Partial Automation of the Multi-revision, Fine-grained Analysis of Code History as an Efficient and Accurate Mechanism to Support Software Development</i> ”	Sept. 2009 – June 2015
M.S. in Information and Computer Sciences, Software track University of California, Irvine Advisor: André van der Hoek Thesis Title: “ <i>Spheres of Influence: Enhancing Support of Indirect Conflicts through Workspace Awareness</i> ”	Sept. 2007 – Aug. 2009
European Union Erasmus Fellowship for Education Abroad School of Computing, Dublin City University, Ireland	Sept. 2003 – June 2004
B.S. in Computer Science University of Granada, Spain Advisor: Juan Carlos Torres Thesis Title: “ <i>Snap: A Dental Prints Recognition System</i> ”	Sept. 2000 – Dec. 2005

ADDITIONAL EDUCATION

Teaching Excellence Program University of California, Irvine	April 2015 – June 2015
Science Communication Program Physics Department, University of California, Irvine	Jan 2015 – March 2015
Power Speech Public Speaking Program Drama Department, University of California, Irvine	April 2014 – June 2014
Mentoring Excellence Program University of California, Irvine	May 2014 – June 2014
Mining Software Repositories Summer School School of Computing, Queen’s University, Kingston, ON, Canada	June 2010

AWARDS & HONORS

2023	R3 Certificate for Research Quality and Independence. Agencia Estatal de Investigación, Spain.
2021	Ramón y Cajal Award (#1 in my category. Turned down for Assistant Professor position). Agencia Estatal de Investigación, Spain.
2021	Distinguished Researcher. Universidad Rey Juan Carlos, Spain
2021	NSF CAREER Award, National Science Foundation, U.S.A.
2020	Distinguished Reviewer Award, MSR 2020.
2019	ACM SIGSOFT Distinguished Paper Award, ASE 2019.
2019	Second Best Paper Award, SIGCSE 2019.

- 2018 ACM SIGSOFT Distinguished Paper Award, ESEC/FSE 2018.
- 2009 Dean's Fellowship. Donald Bren School of Information and Computer Science, University of California, Irvine.
- 2007 Fellowship for Graduate Studies, Caja Madrid Foundation, Spain.
- 2003 Erasmus Exchange Fellowship for 1 year of Undergraduate Studies in the European Union

FUNDING

- 2023 EGSVAI: Verificación De Software Eficiente Y Ecológica Mediante La Inteligencia Artificial. Agencia Estatal de Investigación (AEI), PID2022-142964OA-I00, Francisco Servant (PI), 2023–2026. Total: €128,750
- 2021 Autonomous Targeted Software Verification. National Science Foundation CCF-2046403 (CAREER), Francisco Servant (PI), 2021–2025. Total: \$470,374
- 2016 Professional Development Award for Hispanic/Latino Faculty. Hispanic/Latino Faculty & Staff Caucus. Francisco Servant (PI), 2016. Total: \$1,000
- 2016 New Assistant Professor Mentoring Grant. Virginia Tech Office of the Executive Vice President and Provost, Francisco Servant (PI), 2016. Total: \$1,500.

FELLOWSHIPS

- 2009 Dean's Fellowship. Donald Bren School of Information and Computer Science, University of California, Irvine. Francisco Servant, 2009–2013. Total: \$169,970.
- 2007 Caja Madrid Foundation Fellowship for Graduate Studies, Francisco Servant, 2007–2009. Total: 72,013 euros

REFEREED JOURNAL ARTICLES.

(Underlined are students supervised by me)

- JSS'24 (JCR Q2) Mohammed El Arnaoty, **Francisco Servant**. “*OneSpace: Detecting cross-language clones by learning a common embedding space*”. Journal of Systems and Software (JSS), February 2024, 111911, 23 pages. (3.5 impact factor).
- JSS'23 (JCR Q2) Waad Aldndni, Na Meng, **Francisco Servant**. “*Automatic prediction of developers' resolutions for software merge conflicts*”. Journal of Systems and Software (JSS), December 2023, 111836, 16 pages. (3.5 impact factor).
- TOSEM'23 (JCR Q1) Xianhao Jin, **Francisco Servant**. “*HybridCISave: A Combined Build and Test Selection Approach in Continuous Integration*”. ACM Transactions on Software Engineering and Methodology (TOSEM), May 2023, 1049-331X, 38 pages. (4.4 impact factor).
- JSS'22 (JCR Q2) Khadijah Al Safwan, Mohammed Elarnaoty, **Francisco Servant**. “*Developers' Need for the Rationale of Code Commits: An In-breadth and In-depth Study*”. Journal of Systems and Software (JSS), July 2022, 111320, 25 pages. (3.5 impact factor).
- JSS'22 (JCR Q2) Xianhao Jin, **Francisco Servant**. “*Which Builds Are Really Safe to Skip? Maximizing Failure Observation for Build Selection in Continuous Integration*”. Journal of Systems and Software (JSS) 188, June 2022, 111292, 18 pages. (3.5 impact factor).
- JSS'21 (JCR Q2) Rafael Barbudo, Aurora Ramirez, **Francisco Servant**, José Raúl Romero. “*GEML: A Grammar-based Evolutionary Machine Learning Approach for Design-Pattern Detection*”. Journal of Systems and Software (JSS) 175, May 2021, 110919, 24 pages. (3.5 impact factor).

JSS'21
(JCR Q2) Ayaan M. Kazerouni, James C. Davis, Arinjoy Basak, Clifford A. Shaffer, **Francisco Servant**, Stephen H. Edwards. “*Fast and Accurate Incremental Feedback for Students’ Software Tests Using Selective Mutation Analysis*”. Journal of Systems and Software (JSS) 175, May 2021, 110905, 18 pages. (3.5 impact factor).

REFEREED PAPERS IN CONFERENCE PROCEEDINGS (TOP-TIER)

(Underlined are students supervised by me)

- IEEE S&P'23
(CORE A*) Sk Adnan Hassan, Zainab Aamir, Dongyoon Lee, James C. Davis, **Francisco Servant**, “*Improving Developers’ Understanding of Regex Denial of Service Tools through Anti-Patterns and Fix Strategies*”. Proceedings of the 44th IEEE Symposium on Security and Privacy, Technical Research Track (IEEE S&P 2023), San Francisco, CA, U.S.A., May 2023, pp. 1238–1255. **Acceptance Rate: 17%**.
- IEEE S&P'21
(CORE A*) James C. Davis, **Francisco Servant**, Dongyoon Lee, “*Using Selective Memoization to Defeat Regular Expression Denial of Service (ReDoS)*”. Proceedings of the 42nd IEEE Symposium on Security and Privacy, Technical Research Track (IEEE S&P 2021), San Francisco, CA, U.S.A., May 2021, pp. 1–17. **Acceptance Rate: 8%**.
- ICSE'21
(CORE A*) Xianhao Jin, **Francisco Servant**, “*What helped, and what did not? An Evaluation of the Strategies to Improve Continuous Integration*”. Proceedings of the 43rd International Conference on Software Engineering, Technical Research Track (ICSE 2021), Madrid, Spain, May 2021, pp. 213–225. **Acceptance Rate: 22%**.
- ICSE'20
(CORE A*) Xianhao Jin, **Francisco Servant**, “*A Cost-efficient Approach to Building in Continuous Integration*”. Proceedings of the 42nd International Conference on Software Engineering, Technical Research Track (ICSE 2020), Seoul, South Korea, July 2020, pp. 13–25. **Acceptance Rate: 21%**.
- ASE'19
(CORE A*) Louis G. Michael IV, James Donohue, James C. Davis, Dongyoon Lee, **Francisco Servant**, “*Regexes are Hard: Decision-making, Difficulties, and Risks in Programming Regular Expressions*”. Proceedings of the 34th IEEE/ACM International Conference on Automated Software Engineering, Technical Research Track (ASE 2019), San Diego, CA, U.S.A., November 2019, pp. 415–426. **Acceptance Rate: 23%**. *ACM SIGSOFT Distinguished paper award.*
- ESEC/FSE'19
(CORE A*) Khadijah Al Safwan, **Francisco Servant**, “*Decomposing the Rationale of Code Commits: The Software Developers’ Perspective*”. Proceedings of the 27th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, Technical Research Track (ESEC/FSE 2019), Tallinn, Estonia, August 2019, pp. 397–408. **Acceptance Rate: 24%**.
- ESEC/FSE'19
(CORE A*) James C. Davis, Louis G. Michael IV, Christy A. Coghlan, **Francisco Servant**, and Dongyoon Lee, “*Why Aren’t Regular Expressions a Lingua Franca?*”. Proceedings of the 27th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, Technical Research Track (ESEC/FSE 2019), Tallinn, Estonia, August 2019, pp. 443–454. **Acceptance Rate: 24%**.
- SIGCSE'19
(CORE A) Ayaan M. Kazerouni, Clifford A. Shaffer, Stephen H. Edwards, **Francisco Servant**. “*Assessing Incremental Testing Practices and Their Impact on Project Outcomes*”. Proceedings of the 50th ACM Technical Symposium on Computer Science Education, Technical Research Track (SIGCSE 2019), February 27-March 2, 2019, Minneapolis, MN, USA, pp. 407-413. **Acceptance Rate: 32%**. *2nd Best paper award.*

- ESEC/FSE'18 (CORE A*) James C. Davis, Christy A. Coghlan, **Francisco Servant**, and Dongyoon Lee, “*The Impact of Regular Expression Denial of Service (REDOS) in Practice: An Empirical Study at the Ecosystem Scale*”. Proceedings of the 26th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, Technical Research Track (ESEC/FSE 2018), Lake Buena Vista, FL, U.S.A., November 2018, pp. 246–256. **Acceptance Rate: 19%. ACM SIGSOFT Distinguished paper award.**
- ICSE'17 (CORE A*) **Francisco Servant**, James A. Jones, “*Fuzzy Fine-grained Code-history Analysis*”. Proceedings of the 39th International Conference on Software Engineering, Technical Research Track (ICSE 2017), Buenos Aires, Argentina, May 2017, pp. 746–757. **Acceptance Rate: 16%**
- FSE'12 (CORE A*) **Francisco Servant**, James A. Jones, “*History Slicing: Assisting Code-Evolution Tasks*”. Proceedings of the 20th International Symposium on Foundations of Software Engineering, Technical Research Track (FSE 2012), Research Triangle Park, NC, USA, November 2012, pp. 43:1-43:11. **Acceptance Rate: 16.9%**
- ICSE'12 (CORE A*) **Francisco Servant**, James A. Jones, “*WhoseFault: Automatic Developer-to-Fault Assignment Through Fault-Localization*”. Proceedings of the 34th International Conference on Software Engineering, Technical Research Track (ICSE 2012), Zurich, Switzerland, June 2012, pp. 36-46. **Acceptance Rate: 21%**

REFEREED WORKSHOP, SHORT PAPERS, AND OTHER CONFERENCES

- MSR'23 Registered Report Johan Linåker, Bjorn Lundell, **Francisco Servant**, Jonas Gamalielsson, Gregorio Robles. “*Public Sector Open Source Software Projects - How is development organized?*”. International Conference on Mining Software Repositories (MSR 2023), Melbourne, Australia, May 2023, 7 pages.
- JISBD'21 José Raúl Romero, Rafael Barbudo Lunar, Aurora Ramírez, **Francisco Servant**. “*Detección de patrones de diseño con GEML: discusión y enfoque práctico*”. Jornadas de Ingeniería del Software y Bases de Datos (JISBD 2021), Málaga, Spain, September 2021, 14 pages, to appear.
- ICSE'21 Artifact Track (CORE A*) Xianhao Jin, **Francisco Servant**, “*CIBench: A Dataset and Collection of Techniques for Build and Test Selection and Prioritization in Continuous Integration*”. Proceedings of the 43rd International Conference on Software Engineering, Research Artifact Track (ICSE 2021), Madrid, Spain, May 2021, 2 pages, to appear.
- MSR'19 Mining Challenge (CORE A) Xianhao Jin, **Francisco Servant**, “*What Edits Are Done on Highly Answered Stack Overflow Questions? An Empirical Study*”. Proceedings of the 16th International Conference on Mining Software Repositories, Mining Challenge Track (MSR 2019), Montreal, Canada, May 2019, pp. 225-229.
- ICSE'18 Poster Track (CORE A*) Lykes Claytor, **Francisco Servant**, “*Poster: Understanding and Leveraging Developer Inexpertise*”. Proceedings of the 39th International Conference on Software Engineering (ICSE 2018), Gothenburg, Sweden, May 2018, pp. 404-405.
- MSR'18 Mining Challenge (CORE A) Xianhao Jin, **Francisco Servant**, “*The Hidden Cost of Code Completion: Understanding the Impact of the Recommendation-list Length on its Efficiency*”. Proceedings of the 15th International Conference on Mining Software Repositories, Mining Challenge Track (MSR 2018), Gothenburg, Sweden, May 2018, pp. 70–73.
- MSR'17 Mining Challenge (CORE A) Aakash Gautam, Saket Vishwasrao, **Francisco Servant**, “*An Empirical Study of Activity, Popularity, Size, Testing, and Stability in Continuous Integration*”. Proceedings of the 14th International Conference on Mining Software Repositories, Mining Challenge Track (MSR 2017), Buenos Aires, Argentina, May 2017, pp. 495–498.

- ASE'13
Doctoral
Symposium
(CORE A*)
- Francisco Servant**, “*Supporting Bug Investigation using History Analysis*”. Proceedings of the 28th IEEE/ACM International Conference on Automated Software Engineering, Doctoral Symposium Track (ASE 2013), Silicon Valley, California, November 2013, pp. 754-757.
- VISSOFT'13
Tool Demo
(CORE B)
- Francisco Servant**, James A. Jones, “*Chronos: Visualizing Slices of Source-Code History*”. Proceedings of the 1st IEEE International Working Conference on Software Visualization, Tool Demonstrations Track (VISSOFT 2013), Eindhoven, Netherlands, September 2013, pp. 1-4.
- ASE'11
Technical
short paper
(CORE A*)
- Francisco Servant**, James A. Jones, “*History Slicing*”. Proceedings of the 26th IEEE/ACM International Conference on Automated Software Engineering, Technical Research Track (ASE 2011), Lawrence, Kansas, USA, November 2011, pp. 452-455.
- CHASE'10
Workshop
- Francisco Servant**, James A. Jones, André van der Hoek, “*CASI: Preventing Indirect Conflicts through a Live Visualization*”. Proceedings of the International Workshop on Cooperative and Human Aspects of Software Engineering (CHASE 2010), Cape Town, South Africa, May 2010, pp. 39-46.

CONFERENCE PRESENTATIONS

- “*An Empirical Study of Activity, Popularity, Size, Testing, and Stability in Continuous Integration*”. Proceedings of the 14th International Conference on Mining Software Repositories (MSR 2017), Mining Challenge Track, Buenos Aires, Argentina, May 2017.
- “*Fuzzy Fine-grained Code-history Analysis*”. Proceedings of the 39th International Conference on Software Engineering (ICSE 2017), Buenos Aires, Argentina, May 2017.
- “*Supporting Bug Investigation using History Analysis*”. International Conference on Automated Software Engineering, Doctoral Symposium Track (ASE 2013), Silicon Valley, California, November 2013.
- “*Chronos: Visualizing Slices of Source-Code History*”. Working Conference on Software Visualization, Tool Track (VISSOFT 2013), Eindhoven, Netherlands, September 2013.
- “*History Slicing: Assisting Code-Evolution Tasks*”. International Symposium on Foundations of Software Engineering (FSE 2012), Research Triangle Park, NC, USA, November 2012.
- “*WhoseFault: Automatic Developer-to-Fault Assignment Through Fault-Localization*”. International Conference on Software Engineering (ICSE 2012), Zurich, Switzerland, June 2012.
- “*History Slicing*”. International Conference on Automated Software Engineering (ASE 2011), Lawrence, Kansas, USA, November 2011.
- “*CASI: Preventing Indirect Conflicts through a Live Visualization*”. Workshop on Cooperative and Human Aspects of Software Engineering (CHASE 2010), Cape Town, South Africa, May 2010.

INVITED PRESENTATIONS

- “*A Cost-efficient Approach to Building in Continuous Integration*”. Google Journal Club. Virtual, August 2020.
- “*Automated Software Development Support through Optimized Code History Models*”. Second International Summer School on Search-Based Software Engineering, Málaga, Spain, June 2017.
- “*Supporting Software Development through Code History Analysis*”. Computer Science Graduate Seminar. Virginia Commonwealth University (VCU), Virginia, USA, October 2016.
- “*Improving Software Development through Data Analytics*”. Center for the Enhancement of Engineering Diversity (CEED) Seminar. Virginia Tech, Virginia, USA, September 2016.

- “Automatic Software Development Support”. Graduate Recruitment Seminar. Virginia Tech, Virginia, USA, March 2016.
- “Supporting Software Development through Code History Analysis”. Computer Science Graduate Seminar. Virginia Tech, Virginia, USA, February 2016.
- “Understanding Bugs through Code-history Analysis”. ISR Research Forum, Irvine, California, USA, May 2014.
- “Supporting Bug Investigation using History Analysis”. Universidad de Sevilla, Spain. December 2013.
- “History Slicing: Assisting Code-Evolution Tasks”. Universidad Rey Juan Carlos, Madrid, Spain. October 2013.
- “Un futuro de oportunidades”. CITIC-UGR Research Center, Granada, Spain, October 2013.
- “Supporting Code-Evolution Tasks with Code History”. ISR Research Forum, Irvine, California, USA, May 2013.
- “History Slicing”. ISR Research Forum, Irvine, California, USA, May 2012.
- “BranchMon: A Branch Analytics Tool”. Microsoft Research, Redmond, Washington, USA, September 2011.
- “Automatic Developer-to-Failure Assignment”. Microsoft Research, Redmond, Washington, USA, July 2011.
- “Lighthouse - A Coordination Platform Based on Emerging Design”. ISR Research Forum, Irvine, California, USA, June 2009.
- “Snap: A Dental Prints Recognition System”. Microsoft Corporation, Madrid, Spain, January 2006.

TEACHING EXPERIENCE

- Análisis y Diseño de Algoritmos. Instructor. Universidad de Málaga, 1er Cuatrimestre 2023.
- Introducción a la Ingeniería del Software. Instructor. Universidad de Málaga, 1er Cuatrimestre 2023.
- Fundamentos de Software de Comunicaciones. Instructor. Universidad de Málaga, 2º Cuatrimestre 2023.
- Protocolos e Interfaces de Comunicación. Instructor. Universidad de Málaga, 2º Cuatrimestre 2023.
- Redes y Sistemas Distribuidos. Instructor. Universidad de Málaga, 2º Cuatrimestre 2023.
- Redes Móviles Definidas por Software. Instructor. Universidad de Málaga, 1er Cuatrimestre 2022.
- Servicios y Aplicaciones en Redes de Ordenadores. Instructor. Universidad Rey Juan Carlos. 2º Cuatrimestre 2022.
- Servicios y Aplicaciones Telemáticas. Instructor. Universidad Rey Juan Carlos. 2º Cuatrimestre 2022.
- Servicios Telemáticos. Instructor. Universidad Rey Juan Carlos. 2º Cuatrimestre 2022.
- CS 6704: Software Engineering Analytics and Automation. Principal Instructor. Virginia Tech. Fall 2016, Fall 2018, Fall 2020.
- CS 5704: Software Engineering. Principal Instructor. Virginia Tech. Fall 2015, Fall 2017, Fall 2019.
- CS 4704: Software Engineering Capstone. Principal Instructor. Virginia Tech. Fall 2018.
- CS 3704: Intermediate Software Design and Engineering. Principal Instructor. Virginia Tech. Spring 2016, Spring 2018, Spring 2019, Spring 2020, Fall 2020.
- IN4MATX 215: Software Analysis and Testing. Guest Lecture: “Continuous Integration and Delivery”, University of California, Irvine. Spring 2015.

- IN4MATX 115: Software Testing, Analysis, and Quality Assurance. Guest Lecture: “Continuous Delivery”, University of California, Irvine. Fall 2014.
- IN4MATX 215: Software Analysis and Testing. Guest Lecture: “Continuous Integration”, University of California, Irvine. Spring 2014.
- IN4MATX 44: Informatics Research Topics. Guest Lecture, University of California, Irvine. Spring 2012.
- IN4MATX 115: Software Testing and Quality Assurance. Reader, University of California, Irvine. Spring 2012.
- IN4MATX 42: Informatics Core II. Reader, University of California, Irvine. Winter 2012.
- IN4MATX 191C: Senior Design Project. Reader, University of California, Irvine. Winter 2012.
- IN4MATX 113: Requirements Analysis & Engineering. Reader, University of California, Irvine. Fall 2011.
- IN4MATX 191B: Senior Design Project. Reader, University of California, Irvine. Fall 2011.
- IN4MATX 215: Software Analysis and Testing. Guest Lecture: “Automatic Expertise Identification”, University of California, Irvine. Fall 2011.

STUDENTS

Graduate Thesis Advisees

- Waad Aldndni, Ph.D. Computer Science, Virginia Tech (2019–2024). Co-chair with Na Meng. Passed Prelim.
- Mohammed Elarnaoty, Ph.D. Computer Science, Virginia Tech (2018–2024). Passed Prelim.
- Khadijah Al Safwan, Ph.D. Computer Science, Virginia Tech (2016– **Graduated 2023**).
- Xianhao Jin, Ph.D. Computer Science, Virginia Tech (2017– **Graduated 2022**).
- Sk Adnan Hassan, M.S. Computer Science, Virginia Tech (2019– **Graduated 2022**).
- Ting-Chia Chang, M.S. Computer Science, Virginia Tech (2019- **Graduated 2021**)
- Yu-Hsuan Huang, M.S. Computer Science, Virginia Tech (2019- **Graduated 2021**)
- Alon Bendelac, M.S. Computer Science, Virginia Tech (2019–**Graduated 2020**)
- Louis G. Michael IV, M.S. Computer Science, Virginia Tech (2018–**Graduated 2019**)
- Kanagaraj Nachimuthunallasamy, M.S. Computer Science, Virginia Tech (2017–**Graduated 2019**)
- Khadijah Al Safwan, M.S. Computer Science, Virginia Tech (2016–**Graduated 2018**)
- Frank Lykes Claytor, M.S. Computer Science, Virginia Tech (2017–**Graduated 2018**)
- Soumik Ghosh, M.S. Computer Science, Virginia Tech (2016–**Graduated 2017**)

Graduate Thesis Committee Memberships

- Mahir Kabir, Ph.D. Computer Science, Virginia Tech (2019–Present)
- Sheikh Shadab Towqir, Ph.D. Computer Science, Virginia Tech (2019–Present)
- Bowen Shen, Ph.D. Computer Science, Virginia Tech (2018–Present)
- Rifat Sabbir Mansur, Ph.D. Computer Science, Virginia Tech (2018–Present)
- Derek Haqq, Ph.D. Computer Science, Virginia Tech (2017–Present)
- Ying Zhang, Ph.D. Computer Science, Virginia Tech (2020–Graduated 2023)

- Redwan Ibne Seraj Khan, Ph.D. Computer Science, Virginia Tech (2019–2023)
- Shuangyi Li, M.S. Computer Science, Virginia Tech (2020–Graduated 2022)
- Jingoo Han, Ph.D. Computer Science, Virginia Tech (2018–Graduated 2022)
- Breno Dantas Cruz, Ph.D. Computer Science, Virginia Tech (2018–Graduated 2021)
- Steven Lim, M.S. Computer Science, Virginia Tech (2020–Graduated 2021)
- Yin Liu, Ph.D. Computer Science, Virginia Tech (2016–Graduated 2021)
- Kijin An, Ph.D. Computer Science, Virginia Tech (2015–Graduated 2021)
- Bharti Wadhwa, Ph.D. Computer Science, Virginia Tech (2015–Graduated 2020)
- Zheng Song, Ph.D. Computer Science, Virginia Tech (2018–Graduated 2020)
- Myles Frantz, Ph.D. Computer Science, Virginia Tech (2018–Graduated M.S. 2020–Present Ph.D.)
- Peeratham Techapalokul, Ph.D. Computer Science, Virginia Tech (2017–Graduated 2020)
- Fahad Ibrar, M.S. Computer Science, Virginia Tech (2018–Graduated 2020)
- Ayaan Kazerouni, Ph.D. Computer Science, Virginia Tech (2017–Graduated 2020)
- James Davis, Ph.D. Computer Science, Virginia Tech (2015–Graduated 2020)
- Aabhas Bhatia, M.S. Computer Science, Virginia Tech (2018–2019)
- Chengyuan Wen, M.S. Computer Science, Virginia Tech (2017–Graduated 2019)
- Bob Edmison, Ph.D. Computer Science, Virginia Tech (2016–Graduated 2019)
- Mukund Rajagopal, M.S. Computer Science, Virginia Tech (2017–Graduated 2018)
- Nischel Kandru, M.S. Computer Science, Virginia Tech (2017–Graduated 2018)
- Zahra Ghaed, M.S. Computer Science, Virginia Tech (2016–Graduated 2017)
- Jing Pu, M.S. Computer Science, Virginia Tech (2016–Graduated 2016)

Undergraduate Research Advisees

- Carlos Chirito, B.S. Software Engineering (TFG), University of Málaga (2023-Present)
- Ankita Khera, B.S. Computer Science, Virginia Tech (2018–Graduated)
- Kamran Rana, B.S. Computer Science, Virginia Tech (2018–Graduated)
- Jahdiel Couchman, B.S. Computer Science, UNC Charlotte (2017–Graduated)
- Jeremy Anoc, B.S. Information and Computer Science, UC Irvine (2012–Graduated 2013)

Undergraduate Research Committee Memberships

- Javier Guerra, Grado En Ingenieria Telemática (TFG), Universidad de Málaga (Graduated 2022-09).
- Javier Jiménez, Grado En Ingenieria En Sistemas Audiovisuales Y Multimedia (TFG), Universidad Rey Juan Carlos (Graduated 2022-07).
- Javier Estébanez, Grado En Ingenieria En Sistemas Audiovisuales Y Multimedia (TFG), Universidad Rey Juan Carlos (Graduated 2022-07).
- Ignacio Rueda, Grado En Ingenieria En Sistemas Audiovisuales Y Multimedia (TFG), Universidad Rey Juan Carlos (Graduated 2022-06).

EXTERNAL SERVICE, CHAIRING

- 2022, Proceedings Chair, International Conference on Open Source Systems (OSS).
- 2021, Co-chair, International Conference on Software Engineering (ICSE), Demonstrations Track.

EXTERNAL SERVICE, AWARDS

- 2023, Committee member, ACM SIGSOFT Early Career Researcher Award.
- 2023, Committee member, ACM SIGSOFT Frank Anger Memorial Award.
- 2023, Committee member, ACM SIGSOFT Outstanding Doctoral Dissertation Award.

EXTERNAL SERVICE, RESEARCH GRANTS

- 2022, Grant proposals reviewer, Agencia Estatal de Investigación (Spain).
- 2018, Grant proposals reviewer, NSF panel.
- 2017, Grant proposals reviewer, Fonds de recherche du Québec – Nature et technologies (FRQNT).

EXTERNAL SERVICE, RESEARCH JOURNAL REVIEWER

- 2023, IEEE Software, JCR Q2.
- 2023, IEEE Transactions on Software Engineering Journal (TSE, JCR Q1).
- 2023, Journal of Systems and Software (JSS, JCR Q2).
- 2023x4, Empirical Software Engineering Journal (EMSE, JCR Q1).
- 2022x4, Journal of Systems and Software (JSS, JCR Q2).
- 2022x3, Empirical Software Engineering Journal (EMSE, JCR Q1).
- 2022, IEEE Transactions on Software Engineering Journal (TSE, JCR Q1).
- 2021x3, IEEE Transactions on Software Engineering Journal (TSE, JCR Q1).
- 2021x5, Empirical Software Engineering Journal (EMSE, JCR Q1).
- 2020, IEEE Transactions on Software Engineering Journal (TSE, JCR Q1).
- 2020x2, Empirical Software Engineering Journal (EMSE, JCR Q1).
- 2020x2, Journal of Systems and Software (JSS, JCR Q1).
- 2019, IEEE Transactions on Software Engineering Journal (TSE, JCR Q1).
- 2019, Empirical Software Engineering Journal (EMSE, JCR Q1).
- 2018x2, IEEE Transactions on Software Engineering Journal (TSE, JCR Q1).
- 2018, IEEE Software, JCR Q2.
- 2018, Empirical Software Engineering Journal (EMSE, JCR Q1).
- 2018x2, Journal of Systems and Software (JSS, JCR Q1).
- 2017, IEEE Transactions on Software Engineering Journal (TSE, JCR Q1).
- 2016x3, IEEE Transactions on Software Engineering Journal (TSE, JCR Q1).
- 2015, Journal of Internet Services and Applications (JISA).

- 2015, Journal of Systems and Software (JSS, JCR Q1).
- 2013, Central European Journal of Computer Science (CEJCS).

EXTERNAL SERVICE, RESEARCH CONFERENCES

- 2024, PC member, ACM International Conference on the Foundations of Software Engineering (FSE), Technical Track.
- 2023, PC member, ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE), Technical Track.
- 2023, PC member, International Conference on Software Engineering (ICSE), Technical Track.
- 2022, PC member, International Conference on Software Maintenance and Evolution (ICSME), Technical Track.
- 2022, PC member, International Conference on Program Comprehension (ICPC), Technical Track.
- 2021, PC member, International Conference on Software Maintenance and Evolution (ICSME), New Ideas and Emerging Results (NIER) Track.
- 2021, PC member, International Conference on Automated Software Engineering (ASE), Technical Track.
- 2021, Judge, International Conference on Software Engineering (ICSE), Student Research Competition (SRC) Track.
- 2020, PC member, International Conference on Automated Software Engineering (ASE), Technical Track.
- 2020, International Conference on Mining Software Repositories (MSR), Technical Track.
- 2019, International Conference on Mining Software Repositories (MSR), Technical Track.
- 2019, Judge, International Symposium on the Foundations of Software Engineering (FSE), Student Research Competition (SRC) Track.
- 2019, PC member, International Conference on Software Maintenance and Evolution (ICSME), Short papers Track.
- 2019, PC member, International Working Conference on Source Code Analysis and Manipulation (SCAM), Engineering Track.
- 2019, PC member, International Conference on Software Engineering (ICSE), New Ideas and Emerging Results (NIER) Track.
- 2018, PC member, International Conference on Software Maintenance and Evolution (ICSME), Technical track.
- 2018, PC member, International Conference on Software Maintenance and Evolution (ICSME), Artifacts track.
- 2018, PC member, International Symposium on the Foundations of Software Engineering (FSE), New Ideas and Emerging Results (NIER) Track.
- 2018, PC member, International Conference on Program Comprehension (ICPC), Industry Track.
- 2018, PC member, International Conference on Program Comprehension (ICPC), Demonstrations Track.
- 2012, PC member, International Conference on Program Comprehension (ICPC), Demonstrations Track.
- 2012, PC member, International Working Conference on Mining Software Repositories (MSR), Mining Challenge Track.

- 2014, External reviewer, International Symposium on the Foundations of Software Engineering (FSE), Technical track.
- 2014, External reviewer, International Conference on Software Engineering (ICSE), Technical track.
- 2013, External reviewer, International Conference on Software Engineering (ICSE), Technical track.
- 2013, External reviewer, Working Conference on Software Visualization (VISSOFT), Tool Track.
- 2013, External reviewer, Working Conference on Software Visualization (VISSOFT), New Ideas and Emerging Results (NIER) Track.
- 2012, External reviewer, International Conference on Software Engineering (ICSE), Technical track.

INTERNAL SERVICE

- Co-chair, PhD Qualifier, Software engineering Track, at the Computer Science department at Virginia Tech, 2019–2021.
- Committee member, Undergraduate Program Committee at the Computer Science department at Virginia Tech, 2018–2021.
- Committee member, Graduate admissions at the Computer Science department at Virginia Tech, 2016–2018.
- Host for the Multicultural Academic Opportunities Program (MAOP), providing research internships to groups underrepresented in STEM, 2017.
- Committee member, Hispanic Caucus at Virginia Tech, 2015–2021.
- Organizer, Systems reading group seminar, Fall 2016.

PROFESSIONAL AFFILIATIONS

- | | |
|--|----------------|
| • Association for Computing Machinery (ACM) | 2010 – Present |
| • ACM Special Interest Group on Software Engineering (ACM SIGSOFT) | 2010 – Present |
| • Institute for Software Research at UC Irvine (ISR) | 2007 – Present |

REFERENCES

References available upon request