Association for Computing Machinery
Advancing Computing as a Science & Profession

NEWS RELEASE

CONTACT: Jim Ormond
212-626-0505
ormond@hq.acm.org

Leading Software Engineering Researchers and Practitioners to Gather at FSE in Seattle

Six-day event includes workshops, keynote talks and networking events, showcasing industry best practices, latest innovations, and software engineering of the future

New York, NY, October 31, 2016 – Advancements in technology driven by innovations in software development are integral to today's information society. With over 400 people registered to attend from over 20 countries, FSE 2016: the ACM SIGSOFT International Symposium on the Foundation of Software Engineering, provides the ideal platform for stimulating interactions among software engineering practitioners, researchers, educators and students on issues related to software innovation, processes and tools.

Hosted by the Association for Computing Machinery's Special Interest Group on Software Engineering (SIGSOFT), FSE 2016 will feature engaging talks on software engineering of the future; industry best practices; the latest innovations in software engineering; demo tracks; and a student research competition. FSE will be held in Seattle, WA from November 13 to 18, 2016, with the conference on November 15 to17; workshops on November 13, 14 and 18; and doctoral symposium on November 14.

"At FSE, we are focusing not just on the latest research in software engineering, but also on its practical applications and implementation in the industry," said Thomas Zimmermann, Senior Researcher, Microsoft Research and FSE General Chair. "Additionally, the event is expected to be hot grounds for hiring the best software engineering talent in the world and will offer unparalleled networking opportunities."

FSE 2016 Highlights Include:

Keynotes
- **"'Womenomics' and Gender-Inclusive Software: What Software Engineers Need to Know"**
  Margaret Burnett from Oregon State University will show how males and females work differently with software. She will describe personas that help practitioners create gender-inclusive software.

- **"Building a Socio-Technical Theory of Coordination: Why and How"**
  James Herbsleb from Carnegie Mellon University, winner of the 2016 ACM SIGSOFT Outstanding Research Award, will summarize two decades of research to understand and facilitate how work is carried out via novel and evolving organizational forms, driven by factors

such as geographic distribution, collaboration in open source project communities, and open ecosystems.

- **"Correct or usable? The Limits of Traditional Verification"**
  Daniel Jackson from MIT and **Mandana Vaziri** from IBM's T.J. Watson Research Center, winners of the 2016 ACM SIGSOFT Impact Paper Award, will discuss limitations of verification with usability as a key limitation and describe approaches that allow the development of applications that are both usable and correct.

Best Practices from Industry
The conference program features four invited presentations from innovative software practitioners.

- **"Continuous Deployment of Mobile Software at Facebook"**. **Tony Savor**, Engineering Director at Facebook, will share lessons learned in increasing the frequency of mobile releases and describe the latest mobile release process at Facebook and its evolution over time.

- **"Model, Execute, and Deploy: Answering the Hard Questions in End-User Programming."**
  Shan Shan Huang, VP Product Management at LogicBlox will show how to support end-user programmers in building large-scale, complex applications.

- **"Making Invisible Things Visible: Tracking Down Known Vulnerabilities at 3000 Companies." Gazi Mahmud**, Senior Data Scientist and Lead Architect at Sonatype, will talk about how to improve application security and how organizations can balance the need for speed with quality and security early in the development cycle.

- **"Developer Workflow at Google." Caitlin Sadowski**, Software Engineer at Google, will describe the developer workflow at Google, and the use of program analysis, testing, metrics, and tooling to reduce errors when creating and committing changes to software.

Latest Innovations in Software
The conference program includes over 100 presentations on the latest innovations and groundbreaking approaches in debugging, security, privacy, build/configuration systems, testing, program repair, JavaScript, visualization, software analytics, mobile apps, and many other areas.

Seven papers will receive an ACM SIGSOFT Distinguished Paper Award at the conference:

- *"API Code Recommendation Using Statistical Learning from Fine-grained"*
- *"Detecting Sensitive Data Disclosure via Bi-directional Text Correlation Analysis"*
- *"Factors Influencing Code Review Processes in Industry"*
- *"Foraging and Navigations, Fundamentally: Developers' Predictions of Value and Cost"*
- *"Multi-Representational Security Analysis"*
- *"Proteus: Computing Disjunctive Loop Summary via Path Dependency Analysis"*
- *"Why We Refactor? Confessions of GitHub Contributors"*

Software Engineering of the Future

Authors were asked to describe radical new directions that represent disruptive innovations in the making, which can challenge the status quo of the software engineering discipline. The result is a set of nine bold visions for privacy, testing, software analytics, software design, productivity, eye tracking, education, and training in software engineering. Here are two examples of visions that will be presented:

- How will automated Bots change software development? Find out in "Disrupting Developer Productivity One Bot at a Time".

- How are the dystopias in Battlestar Galactica, Fallout 3 and Children of Men relevant for software engineering? Find out in "Designing for Dystopia: Software Engineering Research for the Post-Apocalypse."

For a full conference program please visit https://www.cs.ucdavis.edu/fse2016/.

About SIGSOFT
SIGSOFT focuses on issues related to all aspects of software development and maintenance. Areas of special interest include: requirements, specification and design, software architecture, validation, verification, debugging, software safety, software processes, software management, measurement, user interfaces, configuration management, software engineering environments, and CASE tools. SIGSOFT sponsors or co-sponsors many conferences and events, and publishes *Software Engineering Notes*, a bi-monthly newsletter.

About ACM
ACM, the Association for Computing Machinery (www.acm.org)**,** is the world's largest educational and scientific computing society, uniting computing educators, researchers and professionals to inspire dialogue, share resources and address the field's challenges. ACM strengthens the computing profession's collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development, and professional networking.

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