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Allen P. Nikora is a Principal Member of the IS&CS staff in the Software Quality Assurance Group at JPL, and manager of the Assurance Technology Program Office software element. He has been funded by JPL, the NASA IV&V Facility, and the U. S. Air Force Operational Test and Evaluation Center (AFOTEC) to investigate various aspects of software reliability measurement and fault modeling. With Prof. John Munson of the University of Idaho, he has developed new techniques and tools for estimating a software system's defect content prior to the start of testing. He has recently completed a task funded by NASA's IV&V Facility to improve the rigor of analyzing requirements flowdowns for requirements written in natural language, and has started a follow-on effort, also finded by the IV&V Facility, to automate the transformation of natural-language temporal requirements to Linear Temporal Logic (LTL) expressions. Under a JPL-funded task, he collaborated with Connie Heitmeyer and her group at the Naval Research Laboratory to pilot the use of a specification-based test generator on a set of reusable fault detection, identification, and repair software components for planetary exploration spacecraft. He is the author of the CASRE software reliability modeling tool, developed with funding from AFOTEC. This tool, available from the Open Channel Foundation (http://www.openchannelfoundation.org/projects/CASRE_3.0), has won Space Act and NASA Inventions and Contributions Board awards. Over 600 copies have been downloaded to date, and it has been used at organizations such as Raytheon, the HP Printer Division, Microsoft, and Sun Microsystems. He has been associated with the International Symposium on Software Reliability Engineering (ISSRE) since 1990, having presented papers, serving on the program committee, and serving as General Chair of ISSRE2000. He also served on the ISSRE Steering Committee from November, 2000 through January, 2006. He holds a Ph.D. in Computer Science from the University of Southern California (1998) and a B.S. in Engineering and Applied Science from the California Institute of Technology (1977). He belongs to the IEEE, the IEEE Computer Society, and the IEEE Reliability Society. Recent significant publications are listed below.

1. A. Nikora, "Classifying Requirements: Towards a More Rigorous Analysis of Natural-Language Specifications", Proceedings of the 16th International Symposium on Software Reliability Engineering, Chicago, IL, Nov 8-11, 2005, pp. 291-300.

2. A. Nikora, J. Munson, "An Approach to the Measurement of Software Evolution", Journal of Software Maintenance and Evolution: Research and Practice, vol 17 no 1, 2005, pp. 65-91.

3. A. Nikora, J. Munson, "The Effects of Fault Counting Methods on Fault Model Quality", proceedings of the 28th Annual International Computer Software and Applications Conference (COMPSAC2004), Hong Kong, Sep 28-30, 2004, pp. 294-201. NAMED ONE OF FIVE BEST PAPERS IN CONFERENCE.

4. A. Nikora, J. Munson, "Understanding the Nature of Software Evolution", proceedings of the International Conference on Software Maintenance, Sep 22-26, 2003, Amsterdam, The Netherlands, pp. 83-93. NAMED ONE OF TWO BEST PAPERS IN CONFERENCE.

5. A. Nikora, J. Munson, "Developing Fault Predictors for Evolving Software Systems", proceedings of the 9th International Software Metrics Symposium, Sep 3-5, 2003, Sydney, Australia, pp. 338-350.

6. J. Munson, A. Nikora, "Toward a Quantitative Definition of Software Faults", proceedings of the International Symposium on Software Reliability Engineering, Nov 12-15, 2002, Annapolis, MD, pp. 388-395