

Karl Morris

SERC Center, Room 327
1925 North 12th Street
Philadelphia, PA 19122-1801
United States

Research Interests

- Software Engineering, Model Driven Software Development, Domain-Specific Modeling Languages, Adaptive Middleware, Mobile Computing

Education

- 2009 – 2014 Florida International University, Miami FL
Ph.D., Computer Science

Professional Honors, Prizes and Fellowships

- Government Assistantship in Areas of National Need (GAANN) Fellow – 2010

Selected Peer Reviewed Publications

- Morris, K.A., J. Wei, P. Clarke, and F. Costa. Towards Adaptable Middleware to Support Service Delivery Validation in i-DSML Execution Engines. In 2012 IEEE 14th International Symposium on High-Assurance Systems Engineering (HASE), pages 82 –89, Oct. 2012.
- Allison, M.; Morris, K.A.; Zhenyu Yang; Clarke, P.J.; Costa, F.M., "Towards Reliable Smart Microgrid Behavior Using Runtime Model Synthesis," High-Assurance Systems Engineering (HASE), 2012 IEEE 14th International Symposium on , vol., no., pp.185,192, 25-27 Oct. 2012
- Allison, M.; Morris, K.A.; Clarke, P.J.; Costa, F.M., "Synthesizing Interpreted Domain-Specific Models to Manage Smart Microgrids" Journal of Systems and Software, vol. 96, no. 0, pages 172 – 193, Jun. 2014
- Morris, K.A.; Allison, M.; Costa, F.M.; J. Wei; Clarke, P.J., "An Adaptive Middleware Design for Domain-Specific Virtual Machines" Information and Software Technology
- Morris, K.A.; He, Xudong; Costa, F.M.; Clarke, P.J., Allison, M. "A Method for Validating Intent Model Behavior in DSVMs" HASE 2015

External Reviewer for Journals, Conferences, Books and Workshops

- International Conference on Information Reuse and Integration, 2015
- Software Quality Journal

- Models at run.time, 2013
- International Joint Conference on Software Technologies, 2013
- International Joint Conference on Software Technologies, 2012
- International Computer Software & Applications Conference, 2012
- International Conference on Software Engineering and Knowledge Engineering, 2012
- International Conference on Information Reuse and Integration, 2011
- IASTED International Conference, 2010
- International Conference on Information Reuse and Integration, 2009

Teaching Experience

- Instructor CIS 3515, Mobile Application Development
CIS 1068 Program Design and Abstraction
CIS 1052 Introduction to Web Tech and Programming
- Instructor: CGS 4854, Website Construction and Management – FIU, Spring 2012
- Teaching Assistant: CIS 5372, Foundations of Computer Security
COP 3530, Data Structures
COP 2210, Programming 1
COP 2250, Programming in Java

Other Work Experience

- March 2006 – July 2009 Central Information Technology Office, Kingston, Jamaica

Project Officer – Web & Standards

- Project Manager for Government of Jamaica Open Source Migration Pilot
 - Project Manager for Government of Jamaica Web Standards development
Develop syllabus and certification
 - Member of National ID Systems Working group
 - Member of GovNet Working group
- June 2001 – June 2006 Office of the Contractor-General, Kingston, Jamaica

Database Administrator

- Developed and maintained Database Management systems (MSSQL, MySQL).
- Designed and developed web applications.
- Oversaw procurement and implementation of all IS related equipment and services.
- Created and implemented an Open Source Migration plan on all client and server machines.

- Jan 2001 – May 2001 Pioneer Software Development, Kingston, Jamaica

Programmer/Systems Analyst

- Aug 2000 – Jan 2001 JSDNP UWI Mona, Kingston, Jamaica

Webmaster

University Service

- Graduate student interviewer for new faculty