

Malcolm S. Mollison

CONTACT Mac Mollison 252-943-1497
INFORMATION 5 Bolin Heights mollison@cs.unc.edu
Chapel Hill, North Carolina 27514 <http://cs.unc.edu/~mollison>

SUMMARY Computer Science graduate student. Focusing on next-generation adaptive real-time systems, including theory (underlying scheduling and synchronization principles) and practice (operating system and middleware platforms). U.S. citizen. Secret security clearance.

EDUCATION **University of North Carolina at Chapel Hill**
B.S., Computer Science w/ Honors — May 2009
M.S., Computer Science — Dec. 2011 (anticipated)
Ph.D., Computer Science — 2014 (anticipated)

PUBLICATIONS **Conference Papers**

- M. Mollison, J. Erickson, J. Anderson, S. Baruah, and J. Scoredos. “Mixed Criticality Real-Time Scheduling for Multicore Systems.” Proceedings of the 7th IEEE International Conference on Embedded Software and Systems, pp. 1864-1871, June 2010.

Workshop Papers

- M. Mollison and J. Anderson. “Virtual Real-Time Scheduling.” Proceedings of the Seventh International Workshop on Operating Systems Platforms for Embedded Real-Time Applications, pp. 33-40, July 2011.
- M. Mollison, B. Brandenburg, and J. Anderson. “Towards Unit Testing Real-Time Schedulers in LITMUS^{RT}.” Proceedings of the Fifth International Workshop on Operating Systems Platforms for Embedded Real-Time Applications, July 2009.

COURSES

Graduate Courses

Algorithm Analysis	Operating System Implementation
Real-Time Systems	Computer Architecture and Implementation
Distributed and Concurrent Algorithms	Avionics Software
Distributed and Parallel Computing	

Undergraduate Courses

Algorithm Analysis	Operating Systems
Data Structures	Software Engineering Lab
Programming Language Concepts	Computer Organization
Models of Languages and Computation	Internet Services and Protocols
Introduction to Computer Security	

INTERNSHIPS

Northrop Grumman Aerospace Systems

Summer 2009, 2010, 2011 — El Segundo, CA

- Real-time systems R&D for next-generation unmanned air vehicles (UCAS-D/UCLASS).

International Business Machines

Summer 2008 — Durham, NC

- UI development for cloud-based collaboration software.

FAVORITE
TOOLS

Programming languages: Python, C
Operating systems: GNU/Linux
Software: Linux kernel, git