

Name: Ahmed Alhammad
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I am an Assistant Professor in the department of Computer Engineering at King Saud University in Saudi Arabia. I earned my PhD in Computer Engineering from the University of Waterloo in Canada in 2016.

Work Experience

1 Assistant Professor (2016-present)

King Saud University, Riyadh

- Teaching Digital Systems Design and Embedded Systems Design.

2 Lecturer (2009–2011)

King Saud University, Riyadh

- Teaching Digital Design Lab (FPGA and VHDL)

3 Part-time Design Engineer (2011)

Advanced Electronics Company, Riyadh

- Designing an embedded system based on FreeRTOS operating system and programming GPRS communication protocol

4 Teaching Assistant (2005–2007)

King Saud University, Riyadh

- Giving the tutorial of Signals and Systems course

5 Part-time Design Engineer (2005–2007)

Advanced Electronics Company, Riyadh

- Programming smart cards

6 Associate Design Engineer (2004-2005)

Advanced Electronics Company, Riyadh

- Designing an embedded system based on ARM processor and programming the FAX protocol

7 Computer Engineer (2004)

King Abdu-Aziz City for Science and Technology, Riyadh

- An administrator of NetApp proxy server

Education

1 PhD in Computer Engineering (2011-2016)

University of Waterloo, Waterloo, Canada

- My thesis title was "Memory Efficient Scheduling for Multicore Real-time Systems"

2 Master of Microelectronics Engineering (2007–2009)

RMIT University, Melbourne, Australia

- I received an award from the vice-chancellor for academic excellence. I took 12 courses and did a major project for an Australian company.

3 Bachelor of Computer Engineering (1999–2004)

King Saud University, Riyadh

- I received an award from the dean for academic excellence and received an award from Advanced Electronics Company for best final year project.

Research

I have been a reviewer for more than 10 conferences and journals. The following is my publications:

- 1 Ahmed Alhammad and Rodolfo Pellizzoni
"Schedulability Analysis of Global Memory-predictable Scheduling"—nominated for best paper
Proceedings of the International Conference on Embedded Software (EMSOFT), 2014
- 2 Ahmed Alhammad, Saud Wasly and Rodolfo Pellizzoni
"Memory Efficient Global Scheduling of Real-time Tasks"
Proceedings of IEEE Real-time and Embedded Technology and Applications Symposium (RTAS), 2015
- 3 Ahmed Alhammad and Rodolfo Pellizzoni
"Time-predictable Execution of Multithreaded Applications on Multicore Systems"
Proceedings of IEEE Design, Automation and Test in Europe (DATE), 2014
- 4 Ahmed Alhammad and Rodolfo Pellizzoni
"Trading Cores for Memory Bandwidth in Real-time Systems"
Proceedings of IEEE Real-time and Embedded Technology and Applications Symposium (RTAS), 2016
- 5 Giovanni Gracioli, Ahmed Alhammad, Renato Mancuso, Antonio Augusto Frohlich and Rodolfo Pellizzoni
"A Survey on Cache Management Mechanisms for Real-Time Embedded Systems"
ACM Computing Surveys, December 2014
- 6 Rohan Tabish, Renato Mancuso, Saud Wasly, Ahmed Alhammad, Sujit S Phatak, Rodolfo Pellizzoni, Marco Caccamo
"A Real-time Scratchpad-centric OS for Multi-core Embedded Systems"
Proceedings of IEEE Real-time and Embedded Technology and Applications Symposium (RTAS), 2016