Looking for a Ph.D. student for Fall 2016 or Spring 2017 in the area of Language-based Security (Secure Software) and/or Formal Methods.

The field of language-based security provides foundations and tools for developing secure software. It leverages programming language theory, compilers, and formal methods to solve challenging problems in computer security, and offers elegant alternatives to the “finding and fixing exploits” approach common today. My research involves applying language-based security and formal methods to domains such as web/mobile security, systems and application software security and cyber-physical systems.

Qualifications for the position:

• Excellent undergraduate/Master’s GPA [can be a current undergrad/MS student looking to pursue a Ph.D.]
• Strong experience in at least one of the following:
  – functional/logic programming with OCaml or Prolog
  – automated theorem provers, such as Coq
  – formal programming language analysis background (e.g., type theory, model-checking)
  – knowledge of binary, bytecode and machine languages, such as Java Bytecode, ActionScript Bytecode, Intel x86/x64 machine code, or ARM machine code
  – advanced knowledge of JavaScript/Android/Hybrid-Application (Mobile) Platforms
• Basic computer security background (this can be acquired by taking my ITIS 8200 course)
• Excellent English oral and written skills
• Driven and self-motivated; enjoys interesting and challenging research problems

My Educational Background:

The University of Texas at Dallas, Ph.D. in Computer Science
Carnegie Mellon University, M.S. in Computer Science
Carnegie Mellon University, B.S. in Computer Science, Minor in Mathematics

If you are interested in this position and meet the qualifications, email me at msridhar@uncc.edu.

Additional Notes: This will be a funded position (Tuition Waiver + RA or TA). If you are at UNCC currently and would like to ask me further questions about the position, please stop by my office in Woodward.