

# Research Progress on Radios Implemented with Reconfigurable Computing

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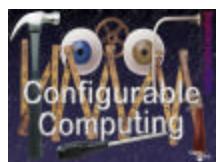
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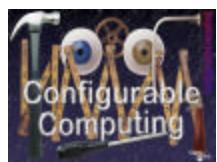
**Web Address:**

<http://www.ee.vt.edu/mprg/research/glomo/index.html>



# Objective of the Project

- Design and build a high speed radio testbed using *configurable computing modules* and advanced receiver architectures
  - Improved capacity
  - Flexibility of platform
  - Increases in processing power of platform
- Demonstrate smart antennas at the handset
- Create a hardware/software test bed to prove networking concepts



# Overview of the Presentation

- Software Radio Using Reconfigurable Computing
  - Introduction to Reconfigurable Computing
  - Example Application: Multiuser Detection
  - Architecture for a General Purpose Configurable Radio
  - Evolution of the Configurable Computing Platform and Configurable Radio
- Smart Antennas at the Handset
  - Project goals
  - Measurements
  - Hardware development