

# The State of WINLAB

Winlab Research Review  
and  
Industrial Advisory Board Meeting

Fall 2000

## Things You Already Know

- **Personnel:**

- 9 faculty and 2 postdocs split between E&CE and CS
- 35+ graduate students
- Enthusiastic undergrads scattered about

- **Collaborative Research:**

- New Jersey Center for Wireless Technology (NJCWT). NJIT, Princeton, Rutgers and Stevens

- **What We Do:**

- Dream and effect the wireless future

**Our Sponsors**

## News Items

- **New Faculty:** Zoran Gajic, E&CE
- **New Postdoctoral Fellow:** Siun-Chuon Mau
- **New Major Funding:** NSF-ITR: Free Bits – the challenge of the wireless internet
  - 3-way grant led by WINLAB (with Princeton and NJIT)
  - \$1.8M over 3 years
  - University buy-in via generous overhead return rate

## WINLAB Growth

- **Junior Faculty Search:**
  - lost stellar candidate to CMU
  - lost another to her husband's job
  - two more great folks ready for the pipeline
- **Director Search:**
  - home stretch (in the administrative maw, Fall 2001 target)

## WINLAB's Current Health

- Funding level deviratives ↑↑↑
- Impressive range of faculty talent
- Good departmental support
- Exceptional collegiality and group cohesion
- Excitement about our research directions

## **WINLAB's Future Health**

- Strong growth projected (at an unseemly pace for academe)
- The new Director can bring:
  - A stronger bridge between CS and E&CE
  - Better organizational structure
  - Even better institutional support
  - Better technology transfer (including incubation)

**We think we're doing pretty well  
and the future looks even rosier!**

## **Back to the Present**

- The Big Research Picture



## Radio Research

- High Speed Radios
- Interference Avoidance/Suppression
- Software Radio Testbed
- SSF Simulation for WCDMA/EDGE
- Dynamic Pricing Resource Management

## Applications Research

- Coordinated Data Delivery
- Data Spaces
- Data Sprinklers
- Email Valet
- Palm Computing and Infostations

## What Does It All Mean to a Sponsor?

- Peeks at the future (architecture, methods and applications)
- Insightful studies (and software!!!) for existing systems and methods
- Influence on future work
- Access to skilled faculty
- Employee recruitment
- Low entry cost
  - Leverage (via gov't grants) has so far allowed static sponsor fees

## **Fall 2000 Research Review Day 1**

- Leverage, Leverage, Leverage!
- More Infostations Zealotry
- You Pays Your Money and You Takes Your Choice
- SIR Targets Ain't What They Seem – beware the outer loop
- Show and Tell at WINLAB
- Dinner at the Rutgers Club

## **Fall 2000 Research Review Day 2**

- GPRS On the Move!
- Our Dog Runs Fast!
- Dancing with Ghosts: adaptive transmission over fading channels
- Hey! No Emergency? Talk to the Palm!
- The Old Ladies in the Ground Floor Window
- IAB: Tell Us What You REALLY Think