executing a vision

behnaam aazhang
an evolving ee

- electricity
an evolving ece

• electricity, electrons, photons, phonons, plasmons, ...
our vision

- electricity, electrons, photons, phonons, plasmons, **neurons**
  - focus on emerging applications
the vision

- materials for energy
- neuro-engineering
- scalable health
the vision

• materials for energy

• neuro-engineering

• scalable health
the vision

- materials for energy
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- scalable health
the vision

- materials for energy
- neuro-engineering
- scalable health

fundamental tools: electricity, electrons, photons, phonons, plasmons
where are we today
faculty

- 22 tenured/tenure track faculty
- 3 professors in the practice
- 2 research faculty
- 3 instructors
- 52 joint/adjunct faculty
- 4 emeritus
faculty

- 15 ieee fellows
- 4 fellows of aaas, 4 fellows of osa, 3 fellows of aps
- 1 american academy of arts and sciences
- 1 pecase, 7 nsf career winners, and 1 sloan fellow
- 4 endowed chairs and 2 emeritus endowed chairs
graduate students

- competitive program

- placement
  - northwestern, uiuc, georgia tech, mit, colorado, virginia, ...
  - texas instruments, samsung, qualcomm, ibm, google, ...

![ECE PhD Postgrad Career](image)
undergraduate students

- the best of the best
- placement

Senior ECE Data Survey

- No Response
- Seeking Employment
- Other
- Industry
- Graduate School

Thursday, April 4, 13
research

• computer engineering

• neuro-engineering

• photonics and nano-engineering

• systems--wireless and signal processing
  • collaborative with international profile
  • proof of concept
external funding
profile

- highly ranked
  - anywhere between 1-25
  - 2013 usnews: 16th and 19th
infrastructure

- abercrombie lab
- brockman hall of physics
- dell butcher hall
- duncan hall
- george r brown
outlook

- new advancement committee (i.e., external advisory board)
outlook

- new advancement committee
  - 4 alums
  - 4 NAE/NAS member
  - 5 academicians
visibility

- open source
  - fundamentals of electrical engineering
  - matlab-enabled massive open online course for signals and systems
  - online, hands-on lab on the fundamentals of electrical engineering
- all online professional masters program
visibility

- continue to grow
  - hire more faculty
  - external research funding > $12M
- continue building strong international visibility
- new focus areas and new applications