

ELECTRICAL & COMPUTER ENGINEERING AT THE UNIVERSITY OF VIRGINIA

Superior Funding

\$450,000 approximate average annual research funding per faculty. Major funders include **NASA, NIH, NSF, DOD, FRA, and NRAO** (National Radio-Astronomy Observatory).

Extraordinary Leadership

23 faculty positions plus 6 research faculty. Among the faculty members there are 6 IEEE/APS Fellows, 4 NSF career award recipients, 8 holders of joint faculty appointments with MSE, BME, CS, SIE and NRAO, and 6 Endowed chairs.



Outstanding Facilities
\$20M Clean Room and Nanolithography Facilities on-site. ECE Faculty are leading exciting new multi-disciplinary institutes at the forefront of nanoscience, biomedical signal processing, and embedded systems for medicine.

Interdisciplinary research centers include NSF-MRSEC (Materials Research Science and Engineering Center), the Nonotechnology and Quantum Institute, Safety Critical Systems, VIVA (Virginia Image and Video Analysis) and the Center for Semi-Custom Integration.

Studying ECE at UVA

210 undergraduates are enrolled in the B.S. program.

115 graduate students are pursuing a M.S., M.E. or Ph.D.

ECE currently offers degree programs in Digital and Computer Systems, Applied Electrophysics and Microelectronics, as well as Communication and Control Systems. Research areas include: Logic Design, Communication Theory, Device Physics, Control Theory, Quantum Physics, Electromagnetics, Nano Electronics, Signal Processing and Computer Architecture.

Financial aid in the form of Assistantships and Fellowships is available to promising graduate students.



The Charles L. Brown Department of Electrical and Computer Engineering is centrally located in Thornton Hall, the home of the Engineering School at the University of Virginia.

Revolutionizing Research

100% of ECE faculty are involved in externally funded research projects.

A Spirit of Entrepreneurship

At least 10 companies have been created as a direct result of ECE Professors' research in the last ten years.



The Path to Success

ECE is the largest branch of engineering with 292,000 jobs.¹ In 2004, **75%** of UVA's ECE graduates had job offers before graduation from companies such as **Intel, Lockheed Martin, Northrop Grumman, Motorola** and various branches of the **US Military**.

Average Starting Salaries for ECE Graduates in 2004

- | | |
|--------|----------|
| ▪ MSEE | \$64,556 |
| ▪ PhD | \$74,283 |

Cutting-Edge Community



The Charles L. Brown Department of Electrical and Computer Engineering at the University of Virginia offers nationally renowned, well-funded programs in:

- **Nanoelectronic Architectures**
- **Sensor and Communication Networks**
- **MEMS and Intelligent Systems**
- **Bio-imaging and Bio Electronics**

Visit us on the web at www.ece.virginia.edu to learn about some of our newest developments.



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¹ Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2004-2005 Edition*, Electrical and Electronics Engineers, on the Internet at <http://www.dls.gov/oco.ocos031.htm> (visited August 27, 2004).

Mr. Jefferson's University

Thomas Jefferson, author of the Declaration of Independence and third President of the United States, founded the University of Virginia in 1819. Of it, he wrote: "This institution will be based on the illimitable freedom of the human mind. For here we are not afraid to follow truth wherever it may lead, nor to tolerate any error so long as reason is left free to combat it."² Inspired by his thirst for knowledge, his love for the commonwealth of Virginia and the beauty of Italian architecture, he realized the dream of his retirement when America's first state university opened its doors in 1825.

Character

Consistently ranked among the top colleges and universities in the nation, the University of Virginia has a well-established reputation for excellence supported by distinguished and influential alumni, faculty and guests. Located an hour and a half southwest of Washington, D.C., in the city of Charlottesville, Va.,—recently voted "Best Place to Live in America"³—the University and the surrounding area offer plenty of opportunities to interact with a distinctive local history, nature and culture every day.



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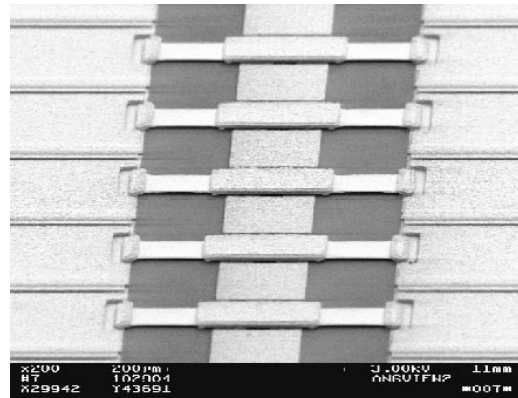
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² Jefferson to William Roscoe, December 27, 1820. Lipscomb, Andrew A. and Albert Ellery Bergh, ed. *The Writings of Thomas Jefferson, Volume 15*. Washington D.C.: Issued under the auspices of the Thomas Jefferson Memorial Association of the United States, 1903-04, p.303.

³ Sperling, Bert and Peter Sander. *Cities Rated and Ranked: More than 400 Metropolitan Areas Evaluated in the U.S. and Canada, 1st Edition*. Hoboken, New Jersey: Wiley Publishing, Inc., March 2004, p.250.

RESEARCH OPPORTUNITIES

- Communications & Controls
- Micro and Nanoelectronic Circuits
- Computer Engineering & Networks
- Signal & Image Processing



Periodically loaded RF MEMS devices in DMTL (distributed MEMS transmission line) based tunable matching network developed by micromachining RF/microwave circuit research group.

