Computer Science @ Virginia Tech

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Things you already know...

- Computing is a big deal.
- The world is flat.
What Is Computer Science?

**Study** and **Design** Computing Systems to
Solve Problems Build Communities
Enrich Lives Create Worlds
Manage Information Invent the Future

**Internet Programming**
**Bioinformatics**
**Database**

**Software Engineering**
**Algorithms**

**Operating Systems**
**Parallel Computing**
**Computer Org.**

**HCI**
**Multimedia**

**Users**
**Application Software**
**Computing Systems Software**
**Computing Systems Hardware**

CS
About the Department

- A 41 year old department
- ~33 full-time faculty in Blacksburg
- ~420 undergraduate majors
- ~200 graduate students
- Accredited by ABET (Accreditation Board for Engineering and Technology)
Where is the CS Department?

- Undergraduate Learning Center
- Advising Center
- Labs to support upper level courses in
  - Systems
  - Software Engineering
  - Multimedia and Cyberart
  - Gaming

McBryde Hall
Where is the CS Department?

Torgersen Hall

- Digital Libraries
- Scientific Computing
- Computational Biology & Bioinformatics
- Software Engineering
- Data Analytics
- VT CAVE
Where is the CS Department?

Knowledgeworks II (CRC)

- 20+ faculty
- 100+ graduate students
- Two centers and associated laboratories:
  - Center for Human-Computer Interaction (CHCI)
  - Center for High-End Computing Systems (CHECS)
- Main office, technical support, …
- BT every 15 minutes (CRC Shuttle)
CS Compared ...

(Completely unofficial and subjective)

- Less hours to graduate
- No required ESM classes
- More abstract, less physical
- More design *and* implementation experiences
- More immediate feedback
- More user-centric
- Combines better with other degrees
CS Compared ... 

MORE JOBS WITH A GREATER VARIETY OF COMPANIES
Who hires VT CS grads?

- Booz Allen Hamilton
- Cisco
- Qualcomm
- Freddie Mac
- Rackspace Hosting
- Palantir
- Fidelity
- Microsoft
- Northrop Grumman
- Amazon
- Lowe's
- CapTech
- Google, IBM, Intel
- Bloomberg, Vanguard, Genworth
- General Dynamics, NSA, MITRE, SAIC
- Washington Post, Eastman Chemical, Stanley Black & Decker, SAS, Museum
- 80 Companies at Fall 2012 CS Career Fair
CS Compared ...

- More programming
- More misunderstood?
- More frustrating?
- Less clearly in engineering?
- Less cool?
CS Compared ...

- More entrepreneurial
- More dynamic
- More ubiquitous
- More creative
- More powerful
Next steps?

- These slides: people.cs.vt.edu/ribbens
- CS @ VT home page: www.cs.vt.edu
- CS Academic Advisors (114 McBryde):
  - Terry Arthur (arthurt@vt.edu)
  - Libby Bradford (bradfolg@vt.edu)
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