Welcome to Penn CIS!
• Dr. Stephanie Weirich (Levine 510)  
  Professor and Undergraduate Chair, CIS

• Ms. Desirae Cesar & Ms. Laura Fox (Levine 308)  
  Associate Directors for the Undergraduate Advising in CIS

• Ms. Amy Calhoun (Moore 170)  
  Associate Director of Integrated Studies (DMD & CMPE)

• SEAS Office of Research & Academic Programs  
  Towne 109
Why Computer Science?
CS is Fun
CS is Empowering
CS is Foundational
Overview of Degree Programs

• Bachelors of Science in Engineering (BSE)
  – CSCI: Computer Science
  – DMD: Digital Media & Design

• Bachelors of Applied Science (BAS)
  – ASCS: Computer Science (intended for dual degrees)
  – ASCB: Computational Biology
  – ASCC: Computer & Cognitive Science

• Joint with Electrical & Systems Engineering
  – CMPE: Computer Engineering
  – NETS: Networked & Social Systems Engineering
Joint Programs outside SEAS

• With SAS:
  – BA in Computer Science (must be a double major)
  – Logic and Computation (SAS major)

• With the Wharton School:
  – M&T: Management and Technology
  – “Honors” dual-degree with any SEAS degree (often CSCI)
885 = total undergraduate enrollment (Fall 17)
about 30% women
Smart choice!

Survey of Penn 2016 graduates

- All CIS degrees $92-105k
- All other SEAS degrees between $70k – $80k

http://www.vpul.upenn.edu/careerservices/files/2016_Senior_Survey.pdf
Undecided?

- Curriculum Deferred (C.D.) Students
  - Feel free to ask advice from any of us.

- You will be assigned a permanent advisor when you declare a major.

- Even if you have declared a major, it is not hard to switch.
CSCI Core Curriculum

- CIS 110: Introduction to Computer Programming
- CIS 120: Programming Languages & Techniques I
- CIS 121: Programming Languages & Techniques II
- CIS 160: Mathematical Foundations for Computer Science
- CIS 262: Automata, Computability, and Complexity
- CIS 320: Introduction to Algorithms
- CIS 240: Introduction to Computer Architecture
- CIS 371: Computer Organization and Design
- CIS 380: Computer Operating Systems
- CIS 400/401: Senior Design Project

(Exact requirements vary with the degree program)
Specialized CIS Course Offerings

• **DMD**
  – CIS 460: Intro. to Computer Graphics Techniques
  – CIS 461: Computer Graphics
  – CIS 462: Computer Animation

• **NETS**
  – NETS 112: Networked Life
  – NETS 150: Market & Social Systems on the Internet
  – NETS 212: Scalable and Cloud Computing
  – NETS 312: Theory of Networks
  – NETS 412: Algorithmic Game Theory

• **CMPE**
  – CIS 350: Software Engineering
  – CIS 441: Embedded Software

All of these can serve as CIS electives for all majors...
Other CIS Course Offerings

• **Electives**
  – Machine Learning, AI, Natural language processing
  – Compilers, advanced programming
  – Distributed / Embedded Systems

• **Mini Courses (CIS 19x)**
  – C++ / Python / Haskell / Rust
  – iPhone / Ruby on Rails / Javascript
  – Unix Skills

• **Graduate Courses (CIS 5xx)**
  – Advanced versions of systems, algorithms, architecture, …
  – Security, programming language foundations, …
Penn CIS Faculty
Engage with Faculty

- Penn’s CIS faculty is filled with world class researchers in all areas across computer science.
- One of the best parts of being a professor is interacting with bright students like you.
- How?
  - participate in class
  - explore research opportunities e.g. Undergraduate Summer Research
  - senior design project
  - talk to us in the hall, find us in the office, or send e-mail
  - ask for help when you need it.
(2) Learn From Your Peers

- In your classes:
  - By working in project teams
  - By forming study groups

- In student organizations:
  - Dining Philosophers
  - Women in Computer Science (WICS)
  - Penn SIGGRAPH
  - PennApps

- While teaching:
  - By being a TA
  - By becoming a tutor
CIS Undergrad Opportunities

Undergraduate CS group
- Social organization
- Hosts Philadelphia Classic programming competition
- Coordinates “tech talks,” mock interviews, etc.

Women in Computer Science (WiCS)
- Founded in 2003
- Hosts many events, including annual High-School Day for Girls
- WICS residential program
Dining Philosophers

• If you like Computer Science, this is the club for you!
• Three committees:
  – Hacking & Learning
  – Entrepreneurship & Jobs
  – Social
• Don't have to be on a committee to join the club
• More information
  – Dining Philosophers FB page
  – CIS@Penn FB group
  – dinphil@gmail.com
  – dp.seas.upenn.edu
How can we make Penn better for women in CS?

- **FemmeHacks** (all-women hackathon)
- **Passion projects** (we fund your inventions!)
- **Meet-ups and hang-outs** (free food)
- **CSterhood** (mentorship program)
- **Get you jobs** (Google, Apple, you name it)

Email: pennwics@gmail.com
Website: wics.cis.upenn.edu
PennApps

- Largest University-run hackathon
- Fall 2017 – September 8th-10th
- Spring 2017 had participants from 171 universities, 50 states and 11 countries
- Penn students can still register
- No experience necessary
(3) Be broad & explore

- Within the Engineering School
  - Departmental Colloquia
  - Interdisciplinary groups like the GRASP laboratory
- Around Campus
  - Classes from around the university
  - Less formal learning experiences (e.g. Preceptorials)
  - Campus Clubs and Organizations
  - Gym facilities / IM sports / Athletics
- In Philadelphia
  - Restaurants / Music / Museums / Culture / ...
(4) Succeed!

- Work hard!
- Have fun!
- Take care of yourself.
- We’re here to help.
1. **CIS 120 location change:** LEIDY LABS 10

2. **New AP Physics policy (applies to freshmen only)**
   5 on Physics B or C exam earns both lecture and lab credit
What Next? Lunch!

1. Pick up a boxed lunch in the Levine Lobby
2. Freshmen advisors have tables with their names on them
   - not all of them could be here
   - there may not be enough room for all advisees at one table
   - there are other faculty around (I'll be there)
   - feel free to ask any of us for advice
3. DMD students should go to the Graphics Lab (Moore 103)
4. Dr. Mintz advisees in Levine 307
5. NETS is in Levine 512