Welcome!

MS-HCI Admitted Student Visit
31 March – 1 April 2016

Prof. Richard Henneman, Director, MS-HCI Program
Dr. Carrie Bruce, Research Director, MS-HCI Program
Thanks!

• Student Volunteer Coordinators
  Caroline Foster    Rachel Leroy
  Harrison Daniels  Ieva Mikolaviciute

• Student Volunteers
  Lots and lots of help!!

• Staff
  CJ Jordan
  Jessica Celestine
Introductions | MS-HCI Leadership

Dick Henneman
Program Director

Carrie Bruce
Research Director

Jessica Celestine
Academic Advisor and Program Coordinator

Melody Jackson
Assoc. Program Director
Interactive Computing

Bruce Walker
Assoc. Program Director
Psychology/IC

Jim Budd
Assoc. Program Director
Industrial Design

Carl DiSalvo
Assoc. Program Director
Literature, Media and Culture
MS-HCI History

1992 – GVU Center founded
- Interdisciplinary – about people and usability for interactive systems
- Faculty from all six Colleges + GTRI
- GVU Brown Bag Lunch today

1996 – Proposal: New interdisciplinary degree: CS (now IC), LCC (now LMC), Psychology

1997 – MS-HCI I: 8 students

2005 – Program Review: Program is world class. One of top 2 HCI programs in the U.S.

2012 – Program Review: MS-HCI and PhD-HCC are among 2 or 3 best in the world

2013 – Industrial Design joins program

2015 – 340 applicants | 100 admitted | 46 enrolled

2016 – MS-HCI XX: 444 applicants!
Admission trends
Why GT MS-HCI?

- **Breadth**
  ~100 students, 50 faculty, 4 departments, GVU, many labs

- **Depth**
  Core HCI/UX skills plus courses taught by faculty thought-leaders in areas where HCI/UX is critical (e.g., CSCW, InfoVis, LST, Ubicomp, Wearable, iTV, ...)

- **Flexible**
  Large number of possible classes, easy to cross disciplinary boundaries

- **Research/Industry foundation**
  Project focus, Internship, Advisory Board

- **Program support**
  Full-time Director + Research Director, Interactivity, State Farm travel grants

- **Outcomes**
  Students find jobs and internships, outstanding reputation
Other highlights

- Mock Interview Day
- Thanksgiving Potluck
- Leadership Challenge Course
- Public Speaking Course
- Graduate Council; Profile Photos
- Reunion in Mountain View
More highlights!

**State Farm** – Lead MS-HCI sponsor for 2014-2015 and 2015-2016
- 20 Travel Grants
- Inaugural Best Final Project Award
- Welcome (back) reception in August

**MailChimp**
- Sponsored Interactivity@GT

**Fiserv**
- Sponsored Mock Interview event

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2015 Best Final Project Awardees

**Florian Foerster** | User-Centered Design of an Adaptive Mobile App for Cancer Patients | Beth Mynatt, Advisor

**Brighton Vino Jegarajan** | Companion Experiences for Live Sports - InSync | Janet Murray, Advisor

**Tim Major** | Visualization Support for Model-Based Systems Engineering | Rahul Basole, Advisor

**Michael Lefco** | Digital Icon Based Asthma Action Plan | Rosa Arriaga, Advisor
Curriculum

Courses

Faculty — Teach — Students — Advise — Industry

Students — Take — Research — Perform — Faculty

Industry — Help — Faculty — Direct — Research

Research — Perform — Industry — Fund — Faculty
Program Overview

• 4 Semesters

• Fixed core (9 credits)
  • CS/PSYC 8803 | Human-Computer Interaction (3)
  • PSYC 6023 | Psychology Research Methods for HCI (4, includes lab)
  • CS/ID/LMC/PSYC 6753 | Professional Practice Seminar (1 credit each fall)

• Specialization courses – based on home school

• Electives – based on your interests
  • May be courses outside IC, ID, DM, PSYC
  • May be Management of Technology Certificate
  • Course not listed in booklet? Make case to school coordinator!

• MS Project
## 36 Credits, Two Academic Years

<table>
<thead>
<tr>
<th>Specialization</th>
<th>Fixed Core Credit House</th>
<th>Specialization Credit Hours</th>
<th>Elective Credit Hours</th>
<th>Project Credit Hours</th>
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<tbody>
<tr>
<td>Interactive Computing</td>
<td>9</td>
<td>9</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Digital Media (LMC)</td>
<td>9</td>
<td>12</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Industrial Design</td>
<td>9</td>
<td>12</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Psychology</td>
<td>9</td>
<td>10*</td>
<td>11*</td>
<td>6</td>
</tr>
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</table>

*proposed change
Typical First-year Schedule | 20 credits

**Fall Semester** (11 credits)
- PSYC 6023 - Psychological Research Methods for HCI (4 credits with lab)
- CS/PSYC 8803 HCI (3)
- CS/LCC/ID/PSYC 6753 Professional Preparation & Practice (1)
- Specialization or Elective (3)

**Spring Semester** (9 credits)
- Specialization or Elective* (3)
- Specialization or Elective (3)
- Specialization or Elective (3)

**Summer**
- Internship

*An Elective may be a special topic course in area of interest for your project*
Typical Second-year Schedule | 16 credits

**Fall Semester** (7-10 credits)
- Project (3)
- Specialization or Elective (3)
- Specialization or Elective (3)
- CS/LCC/PSYC 6753 Professional Preparation & Practice (1)

**Spring Semester** (6-9 credits)
- Project (3)
- Specialization or Elective (3)
- Specialization or Elective (3)

Graduation!!

Many students must take 12 credits per semester; fill out with GVU Brown Bag, seminars, research credits
Huge Menu of Elective Courses:

- Aerospace Engineering
- Architecture
- Industrial Design
- Interactive Computing
- International Affairs
- Industrial Systems and Engineering
- Literature, Media and Communication
- Management (MOT Certificate)
- Music
- Psychology
- Public Policy
- Any other relevant course
  Flexible to meet your intellectual goals, but must be pre-approved

See mshci.gatech.edu for a long list
Research @ GT MS-HCI

- **Evidence-Based Design** and **Design Reasoning**
- Course/lab projects and masters research project
- Program provides exceptional support:
  - Advising students in planning and executing research projects
  - Coordinating research-related resources and opportunities
  - Promoting research dissemination

“I think you should be more explicit here in step two.”
from *What’s so Funny about Science?* by Sidney Harris (1977)
Labs, labs, and more labs
People in Food Deserts Eat Much Differently than the Rest of America

Georgia Tech researchers create 3-armed drummer

Banning Pro-Eating Disorder Words On Instagram Doesn't Work

Robots could learn human values by reading stories, research suggests

Could this turn your vacation videos into masterpieces? Software sifts through footage to pick out holiday highlights

‘Civic Computing’ workshop leads an unlikely group of youth to help advance metro city’s vision

Georgia Tech trains Watson AI to 'chat,' spark more creativity in humans
Design, Prototyping, Evaluation Resources
Masters Research Project

- Individual or partner
- Faculty advisor
- 6-credits (2 semesters)
- Deliverables: proposal, final report, presentation, artifacts

1st Year
- Explore
- Project work
- August

2nd Year
- Choose topic and advisor
- Project work
- December
- Intern and project work
- May

GRADUATE
design[ED] Lab: A design-thinking curriculum for teenagers

• Civic computing

• HS students reviewed College Park’s 20-year Comprehensive Plan (2011 – 2031) and identified three key issues: perception of crime, decreasing standardized test scores, and impact of crime on youth.

• Students brainstormed solutions, iterated on the prototypes, and critiqued their peers’ work to come up with viable technology concepts.

• Concepts were displayed in February at a special event open to the public at the Museum of Design Atlanta.
Georgia Brew Finder: Beer Review and Data Visualization

Sweet Auburn: A walk through Atlanta’s historic district
Students

Faculty → Teach → Students

Teach → Advise → Students

Advise → Direct → Students

Direct → Perform → Research

Perform → Fund → Industry

Industry → Hire → Students

Hire → Help → Students

Help → Take → Courses

Take → Teach → Faculty

Teach → Advise → Students

Advise → Direct → Students

Direct → Perform → Research

Perform → Fund → Industry

Industry → Hire → Students

Hire → Help → Students

Help → Take → Courses

Take → Teach → Faculty
Demographics

~100 students (Fall 2015)
Nationality: US, China, India, and many other countries
Approximately even male/female split
Specialization:
  50%  : Interactive Computing
  25%  : Industrial Design
  13%  : Digital Media (LMC)
  12%  : Psychology
### MS-HCI: One Part of HCI@GT*

<table>
<thead>
<tr>
<th>Degree Name</th>
<th>Enrollment</th>
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<tbody>
<tr>
<td>MS-HCI</td>
<td>88</td>
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<tr>
<td>MSCS – HCI Specialization</td>
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<tr>
<td>MSCS – Social Computing</td>
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<tr>
<td>MS Digital Media</td>
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<td>MS Industrial Design</td>
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<td>MS Music Technology</td>
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<td><strong>TOTAL</strong></td>
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<td>PhD CS HCI</td>
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<tr>
<td>PhD Digital Media</td>
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<tr>
<td>PhD Psychology</td>
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<tr>
<td>DR Music Technology</td>
<td>4</td>
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*2014 Totals
How are you funding your degree?*

*Survey conducted March 2016 of current MS-HCI students
68 students completed the survey
Funding status for each semester?*

<table>
<thead>
<tr>
<th>Semester</th>
<th>GRA</th>
<th>GTA</th>
<th>Worked at a company</th>
<th>No funding, not looking</th>
<th>No funding, wanted it</th>
<th>Hourly on campus</th>
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Percent (of those who sought funding) who had it:

- Semester 1: 53%
- Semester 2: 77%
- Semester 3: 92%
- Semester 4: 96%

*Results offer no guarantee of future availability of funding
If you have a GRA/GTA, how did you get it?

- I did a good job in class and was asked
- I volunteered to work for free in a lab
- I initiated contact with a professor and asked about opportunities
- A fellow student recommended me for the job
- Other

Check out page on MSHCI website for data from 2013, along with tips for finding funding:
Housing 1

In what geographic area do you live?

- Home Park (North of Tenth Street): 9 (13.2%)
- Westside (West of Northside Drive): 10 (14.7%)
- On-Campus graduate student housing: 10 (14.7%)
- Midtown (East of TSRB): 19 (27.9%)
- OPT (Outside the Perimeter): 5 (7.4%)
- East (e.g., Emory, L5P, Inman Park, Decatur, Candler Park): 3 (4.4%)
- North (e.g., Buckhead, Brookhaven, Chamblee): 6 (8.8%)
- Other: 6 (8.8%)

On average, how much do you pay each month for housing (including rent and utilities)?

- Less than $600: 12 (17.9%)
- $600-$799: 15 (22.4%)
- $800 - $999: 19 (28.4%)
- $1000 - $1199: 12 (17.9%)
- I live with my parents: 3 (4.5%)
- Other: 6 (9%)
**Housing 2**

**What resources did you use to find housing before your first semester?**

- **Friends**: 38 (55.9%)
- **Internet search**: 43 (63.2%)
- **Current MS-HCI students**: 23 (33.8%)
- **Parents**: 5 (7.4%)
- **GT Housing Office**: 10 (14.7%)
- **Facebook group**: 16 (23.5%)
- **Other**: 11 (16.2%)

**Estimate the number of miles from where you live to campus.**

- < .5 mile: 32 (47.1%)
- 1 mile: 16 (23.5%)
- 3 miles: 3 (4.4%)
- 5 miles: 8 (11.8%)
- 10 or more miles: 9 (13.2%)
Housing 3

What are your main modes of transportation?

- Walk: 50 (73.5%)
- Car: 30 (44.1%)
- Bicycle: 9 (13.2%)
- MARTA bus: 3 (4.4%)
- MARTA subway: 6 (8.8%)
- Tech Trolley/Stinger Bus: 31 (45.6%)
- Other: 4 (5.9%)

With how many people do you live?

- I live by myself: 8 (11.8%)
- One roommate: 27 (39.7%)
- Two roommates: 11 (16.2%)
- Three roommates: 8 (11.8%)
- I live with my family: 9 (13.2%)
- Four roommates: 5 (7.4%)
Industry Connections
Support for internship/job

• Job Fairs:
  - College of Computing job fair
  - Interactivity@GT 2015 | Resume Book
  - Georgia Tech job fair

• We receive many job announcements

• Networking
  - Current students
  - Alumni
  - Atlanta events

• Mock interviews/resume reviews
Interactivity@GT

• “Reverse Job Fair”
  Students show off their work
  Attended by 40+ companies, local and national and international
  Usually held in February
Grads Have Interned or Worked at...
Dozens and dozens of companies, big and small

- Web design
- Interactive marketing (old ad firms, and new)
- Fortune 500, all have web presence, most if not all do mobile apps
Questions?
And now, for the real story....