The importance of doing research as an undergrad and
HOW TO GO ABOUT DOING IT
Atif Memon (atif@cs.umd.edu)
Why Research?

• Course projects have fixed and expected outcomes

• Creativity

• Innovation

• Lead the world with research
  - NIH (health sciences)
  - NASA (space sciences)
  - IBM, Microsoft, Google (hardware/software)
Advantages for Grad School

• **Need letters**
  - From researchers would be great

• **Authorship in papers**
  - Many applicants have publications
  - Make your application look better
Find Out for Yourselves!!

• Many research opportunities for undergrads at Maryland
  - Independent study
  - Undergraduate Research Assistant Program
  - University Honors Program
  - GEMSTONE program
Independent Research

• Talk to Faculty
• Work with them on their research projects
URAP

• URAP (Undergraduate Research Assistant Program)
  - administered by the Office of the Dean for Undergraduate Studies
• Introduces undergraduates to research
• Students spend four to six hours a week working on a faculty member's research
• Receive an Undergraduate Research Assistant notation on their transcript
URAP

• **URAP is non-competitive**
  - open to students of all majors and disciplines
  - do not have to be an "A" student
    • good academic standing
      - minimum grade point average of 2.0
    • at least 15 credits completed at College Park

• **Student working with me through URAP**
  - Seminar, Research Paper, Conference Travel

• [http://www.ugresearch.umd.edu/URAP/URAP.htm](http://www.ugresearch.umd.edu/URAP/URAP.htm)
University Honors Program

• Long-established program for the most talented students on campus in their first two years

• UNDERGRADUATE RESEARCH IN HONORS
  – offers opportunities to explore research via coursework and/or independent research
  – HONR 169Z interdisciplinary lecture-discussion course
    • Introduces students to the kinds of questions that scholars in a variety of academic fields bring to the pursuit of knowledge
Undergraduate Research In Honors

- **HONR 200**
  - for students in their first year
  - learn about faculty research
  - explore practical/ethical issues surrounding research

- **HONR 201**
  - Independent study
Honors In Junior & Senior Years

• May choose to continue in one of the 40 Departmental Honors programs
• Narrow your focus from the broad-based nature of the first two years of Honors work
• Departmental programs usually involve working closely with a faculty mentor on an independent research project that often culminates in an Honors thesis
• My Honors student
  - Reverse Engineer MS Office
• http://www.honors.umd.edu/
Honors students are invited to participate in Gemstone

- A unique program that integrates technological and social issues into team research projects guided by a faculty mentor and spanning all four undergraduate years

http://gemstone.umd.edu