

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 Yourself!!

- 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>

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/>

GEMSTONE

- 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>