

 ANITA B.ORG 2023  
GRACE HOPPER  
**CELEBRATION**

THE WAY  
**FORWARD**



# How to Successfully Apply to Graduate School

Jazette Johnson | University of Michigan  
Gloria Washington | Howard University & CRA-WP Board

# Hi I'm Jazette Johnson, Ph.D. !



## Education



**Spelman College '15** →  
B.S. in Computer Science



**Vanderbilt University '18** →  
*M.S. in Human Computer Interaction*



**University of California Irvine '23** →  
Ph.D. in Informatics

## Currently:

**Senior Research Scientist** →  
*Howard University*

**Postdoctoral Research Fellow** →  
*University of Michigan*



## Research

- Accessibility
- Aging + health technology
- Online community building
- AI + voice technologies

# About Me: Gloria Washington



## Howard University

Associate Professor, Computer Science

**BS** | Lincoln University

**MS & PhD** | George Washington University

## *Areas of expertise*

- Human-Centered Computing
- Affective Computing
- Computer Science Education

## Awards and Honors

- Intelligence Community Postdoctoral Award Fellow
- Young Researcher Award Recipient
- National Physical Science Consortium Fellow

## Personal

- I want to help Black Women get PhDs in CS
- Love undergraduate research ...is that a crime?



**HOW TO APPLY?**

# Make a Graduate School List

- **Dream Schools**
  - The more competitive and challenging programs in your desired field
- **Safety schools**
  - Schools where you meet or exceed the academic requirements
- **Target Schools**
  - Schools you believe you have a high chance of being admitted

# Prospective Advisors

- **Explore websites to find faculty you would be interested in working with.**
- **Explore Faculty research**
  - By looking at their websites and searching for their latest research publications (use *scholar.google.com*)
- **For PhD: Select 2-3 faculty you would like to be advised by**
  - Make sure you understand what they focus on at least at a high level. Select at least one or two papers from them to read more carefully

# Prospective Advisors

- **Know what is required of you to apply to the specific institution**
  - GPA Requirements
  - Personal Statement
  - Research Statement
  - Transcripts (request early)
  - # of Recommenders needed
  - CV
  - Deadlines
- **Pro Tip: Make a spreadsheet to keep track of your application progress so you are able to stay on top of the deadlines for each location**



# RECOMMENDATIONS

# Who to ask for a recommendation?

Preferably:

- Professors who know your work well.
- Professors who you have done research with.
- Professors who you believe will speak highly of you and all that you do.

**Note: passing one class with them might not be enough for a professor to write you a recommendation**

# How to ask for a recommendation?

Face - to- Face Meeting (strongly preferred)

“I’m applying to <insert school/program> would you be willing to write a  
\***STRONG**\* recommendation on my behalf?”

Watch of signals of **hesitation**, you may not want them as a recommender.

# Provide Recommenders with Materials

To help your recommenders with the writing process who should provide them with the follow:

- Personal Statement
- Research Statement
- CV
- Schools/ Programs/ Deadline

Remember Professors as busy as well, so reminding them about the recommendation is key. **Tip: Set a reminder to send a reminder :)**



# **PROPOSAL STATEMENTS & RESEARCH STATEMENTS**

# Personal Statement -vs- Research Statement

## Personal Statement

*Who are you as an individual?*

*What is your history and broader goals?*

- Personal **motivations** for applying to the program
- Major relevant accomplishments/history
- Challenges experiences along the way that may have affected your academics
- Anything unique
  - Background
  - Events
  - Culture?

## Research Statement

What you want to do?

- Academic Strengths
- Career Goals
- **Research Interest!**
  - **What** you want to work on?
  - **Why** you want to work on that?
  - **Who** you want to work with?
- Program Fit

***Basically another way to say "Statement of Purpose".***

# Personal (History) Statement: a chance to tell your story

- **Be creative.....formally**
  - This is you introducing yourself to the admissions committee
  - But **authenticity** is key, don't exaggerate or write to impress
- **Discuss**
  - Motivations
  - Relevant Accomplishments
    - Research
    - Leadership Experiences
    - Community Service
  - Why you think graduate studies will be useful for your goals
- **Make it program specific:**
  - Mention the program (e.g., UCL's Informatics program)
  - Show that this statement isn't the same used for all your other applications

**How does your current and past work experiences contribute to your future research goals?**



# Research Statement: components

- Brief explanation of:
  - Your past research experiences
  - Your current research initiatives
  - Your future work

# Research Statement: past research

- How did you initially become interested in research?
- Describe some of your past research experience:
  - What was the question you were trying to answer?/ What were you trying to solve?
  - What were the findings?
  - What did you learn from this work?
  - Choose 1 to 2 projects that show your beginning trajectory
- **IF NO RESEARCH EXPERIENCE**
  - Discuss how you have become interested in research through the projects that you've worked on.
  - Express a solid understanding of the specific or general area you are interested in working in -> compensate by showing you are knowledgeable about the field.
  - How would you be able to contribute to the greater research initiative of the lab you are applying to.

# Research Statement: current research

- What are the research questions you are aiming to answer?
- What have you found so far?
- How does it fit into your broader research agenda?

# Research Statement: future research

- What problems are you interested in working on?
  - As you formulate the content express **what excites you** about research or this research area in general
  - If there is space, mention how you may do the research
- **Discuss how prospective professor(s) would contribute to the work, and visa versa**
  - Based on their past research and expertise, and how you both align.
  - Show some flexibility: what you imagine you will be researching on can change
    - But not too much!
- Flaunt what you know, but avoid jargon!

# FUNDING

A large, stylized blue circular graphic is positioned on the right side of the slide. It consists of a dark blue outer ring and a lighter blue inner ring, creating a sense of depth and movement. The graphic is partially cut off by the right edge of the frame.

# Funding

Ph.D. Programs

Often funded through **Teachers  
Assistantships** or **Graduate Student  
Researcher**

Master Programs

Rarely funded

**(Most are restricted to US citizens)**

GEM Fellowship

NSF GRFP

Ford Fellowship

NIH Fellowship

***Many Others....***

<b>Master's degree</b>	<b>Ph.D. degree</b>
<b>1-3 years</b>	<b>3-7 years (most often 4-6)</b>
<b>Courses + Project or Thesis</b> <b>Some programs: Courses only</b>	<b>Courses + Research + Dissertation</b>
<b>More attractive for industry/lab</b>	<b>Minimum for industry/lab research</b>
<b>Minimum for academic instructor</b>	<b>Minimum for tenure-track academic position</b>
<b>Some opportunities to specialize</b>	<b>Become expert in a particular research area</b>
<b>Often limited graduate study funding</b>	<b>Easier to obtain RA/TA support</b>

# WHY GRAD SCHOOL?

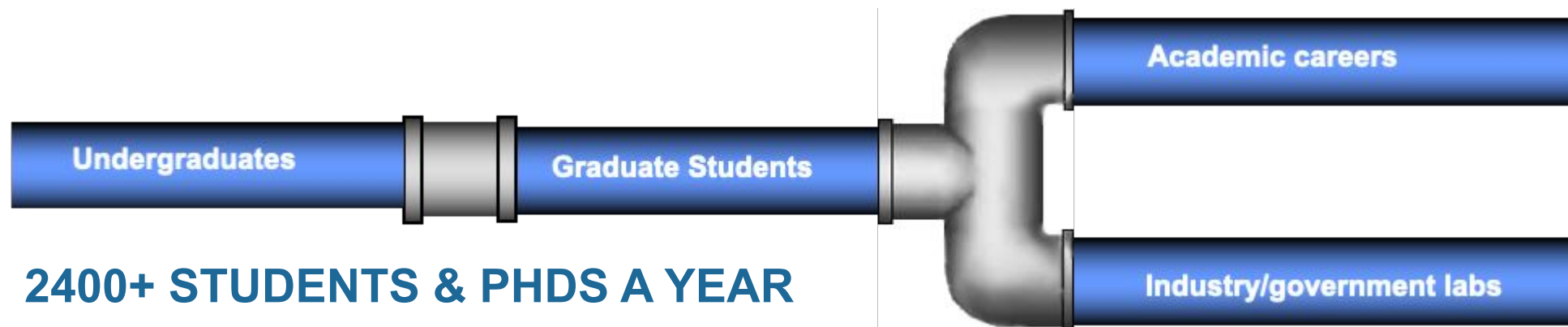


# What Is CRA-WP?

## Individual & Group Research Mentoring

Our mission is to widen the participation and improve the access, opportunities, and positive experiences of individuals from populations underrepresented in computing research and education. We individual and group research mentoring provide for:

- *Undergrads* — Undergraduate Research Experiences (DREU), Scholarships for Women Studying Information Security (SWSIS)
- *Grad Students* — CSGrad4US Fellowships, Grad Cohort for IDEALS, Grad Cohort for Women, Mentoring Tracks at GHC, and Scholarships for Women Studying Information Security (SWSIS)
- *Academics/PhD Researchers* — Career Mentoring Workshop (CMW), CSGrad4US Mentoring Program, and Mentoring Tracks at GHC



# Scan for Handout





## Deciding Where to Apply

1. What areas of computing interest me? (Architecture, AI, Bioinformatics, HCI, Systems, Theory, CS Education, etc.)
2. What type of degree am I considering? MS? PhD? Why?
3. What type of academic environment works well for me?
4. Do I have any geographic preferences? Any restrictions?
5. What are my academic credentials? (GPA, research experience, test scores, communication skills)
6. Who is on the faculty at the school I am applying to? Who would I like to be my advisor?

## Preparing Application Materials (Pay attention to deadlines)

EVERY program is different, but most want:

- application (basic contact info)
- transcripts
- letters of recommendation (2-3)
- statement of purpose (goals/research/intent)
- resume
- test scores (GRE; TOEFL or IELTS)
- fee

## Engaging Reference Letter Writers

If planning to take time off from school before applying, keep in touch with faculty.

Ask “Would you be able to provide a strong recommendation?”

Give them materials (transcript, resume, statement of purpose, chart of schools, deadlines, how to submit letter) at least 2 -3 weeks before first deadline.



<b>Taking GREs</b>	Take spring junior/fall senior years; retake if needed. If non-native English speaker take proficiency exam (e.g., TOEFL, IELTS).
<b>Finalizing Applications</b>	Follow up with letter writers, report test scores, and request official transcripts.
<b>Financing Your Graduate Study</b>	Apply for teaching assistantships, research assistantships, fellowships (NSF Graduate Fellowship), and other grants. Deadlines may be as early as mid-Fall for next academic year.
<b>Evaluating Offers</b>	Spend time researching programs. Visit the schools, meet faculty in your interest area(s), meet current grad students/alumni and ask about their experiences.
<b>Making the Final Decision</b>	You will likely do well at any of your top choices. Make a decision, inform schools, write thank you notes to letter writers, and CELEBRATE!

# Additional Resources



Handout with  
this content

Applying to Ph.D. Programs in Computer Science:

<https://www.cs.cmu.edu/~harchol/gradschooltalk.pdf>



M.S. or Ph.D.? And how to apply:

<https://cs.stanford.edu/degrees/phd/PhD/GraduateSchoolAdvice.pdf>





**QUESTIONS?**

# THANK YOU



**Jazette Johnson, Ph.D.**

