

I am currently a [PhD candidate](#) studying Information science at the [University of Michigan - Ann Arbor](#). My area of interest is in Information Retrieval (IR), with a particular focus on education systems.

## EDUCATION



- PhD Information (*In-Progress*) CGPA: 3.78/4.00 2014 - Present  
School of Information  
University of Michigan, Ann Arbor
- BSc Engineering 2010 - 2014  
School of Electrical Engineering and Computer Science (SEECs)  
National University of Sciences and Technology (NUST), Islamabad

## WORKSHOPS & ONLINE COURSES

- Attended Search as Learning (SAL) Workshop at SIGIR 2016 2016
- Conducted IEEE Flash Workshop for Engineering Students at NUST 2011
- Participated in IEEE Android Development Workshop 2011
- Machine Learning Online Course - Stanford University 2011
- Introduction to Databases Online Course - Stanford University 2011

## WORK EXPERIENCE & ASSISTANTSHIP



- Graduate Student Instructor at University of Michigan 2016 - Present
- Research Assistant at University of Michigan 2014 - 2016
- Teaching Assistant for course on Engineering Economics at NUST 2012
- Summer Internship at NUST - Android Development 2012
- Paid Research Internship - Android-Based Home Automation 2012  
Project sponsored by National Radio and Telecom Corporation (NRTC)
- Research Internship - iTeach, uLearn 2013  
Project sponsored by National Foundation for Resource Development (NFRD)

## RESEARCH PAPERS

- Syed, R. and Collins-Thompson, K. (2016). Optimizing search results for educational goals: Incorporating keyword density as a retrieval objective. In *Second International Workshop on Search as Learning (SaL 2016)*. ACM. ([paper](#)) ([slides](#)) 2016
- Collins-Thompson, K., Rieh, S. Y., Haynes, C. C., & Syed, R. (2016, March). Assessing Learning Outcomes in Web Search: A Comparison of Tasks and Query Strategies. In *Proceedings of the 2016 ACM on Conference on Human Information Interaction and Retrieval* (pp. 163-172). ACM. ([paper](#)) 2016

## RESEARCH/SEMESTER PROJECTS

- Optimizing Search Ranking for Educational Goals (*In Progress*) 2015 - Present
- Real-time Intrinsically Diverse Search engine 2014 - 2015
- Autonomous Landmine Detection & Mapping System 2014
- Accelerometer-based Virtual Archery 2013
- Android Home Automation System 2012
- Online Crime Reporting System 2012
- Fast Food Order and Delivery System 2007

## COMPUTER SKILLS </>

- General Purpose Programming  
C, C++, Java, Python, Visual Basic 6.0
- Data Processing Programming  
R, Matlab, Octave
- Web Development (Client-side)  
HTML5, CSS3, Javascript, JQuery, Flash
- Web Development (Server-side)  
PHP, MySQL, SQLite
- Mobile Development  
Android
- Hardware Development  
Assembly Code, Embedded C, Raspberry Pi