

# RAIDA KARIM

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## EDUCATION

**University of Washington (UW)**, Seattle, WA

**Bachelor of Science - Computer Science (GPA: 3.73/4.00)**, Expected June 2021

- **Course Highlights:** Data Structures, cv Design & Implementation, Hardware/Software Interface, Systems Programming, Natural Language Processing (NLP), Robotics, Entrepreneurship

## RESEARCH INTERESTS

- Applications of Human-Computer Interaction, Robotics, and Artificial Intelligence for urging human, health, and sustainability issues
- Techniques of Machine Learning, and Data Science to comprehend insightful large-scale data and uncover root obstacles to sustainable environment, and human health
- Methods of Entrepreneurship to create platforms for offering purposeful leadership from technological and organizational systems

## WORK EXPERIENCES

**Undergraduate Researcher, Directed Research Group (DRG),**

**Human Centered Design & Engineering (HCDE) Department**, UW Seattle, WA June 2020 – Present

Mentor(s): Dr. Maya Cakmak & Dr. Elin A. Björling

- Developing a social robot to manage and reduce stress in teens by implementing human centered interactivity through touch screen stress-meter, facial, and speech recognition capabilities

**Software Engineering Intern, Cisco Systems, Inc.**, Seattle, WA

June 2020 – Present

Working with the Webex Platform Services team to implement a new welcome email template for the unified clients of their cloud microservices - Webex Teams and Meetings using Spring Boot framework

**Undergraduate Researcher, NLP Group,**

**Computer Science & Engineering (CSE) Department**, UW Seattle, WA

Sept 2019 – Mar 2020

Mentor(s): Dr. Yejin Choi & Saadia Gabriel

- Generated, analyzed, and visualized math word problems from MathQA dataset (<https://math-qa.github.io/math-QA/>), consisting of 37, 200 math word problems, corresponding lists of multiple-choice options and aligned operation programs, using transformer model architecture
- Made modifications, ran experiments, and evaluated results from pertained model

## TECHNICAL QUALIFICATIONS

**Programming Languages:** Java, Python, C/C++, R, JavaScript, HTML/CSS

**Libraries/Frameworks:** REST, Spring, Cozmo SDK, OpenCV, Scikit-Image, Scikit-Learn, RStudio, PyTorch

**Tools:** Git, Linux/Unix, IntelliJ, Maven, LaTeX

## RELEVANT COURSE PROJECTS

**CozmoTA – Robotics Capstone**, CSE 481

May – June 2020

- Developed a Cozmo robot teaching assistant in Cozmo SDK platform in a three-member team
- Implemented navigation, manipulation, and perception capabilities in robot TA for classrooms

**BIO.ME (Startup Prototype) – Entrepreneurship**, CSE 490

Jan – Mar 2020

- Prototyped startup for instant dietary service to IBS (Irritable Bowel Syndrome) patients
- Solidified technicalities of product features with market fit
- Managed dependencies of all teams – research, marketing/sales, and customer support

- Seattle Gentrification App – Data Analysis & Visualization**, Informatics (INFO) 201 Jan - Mar 2019
- Developed an interactive app to show gentrification effects in Seattle comparing to other cities
  - Utilized RStudio packages for data wrangling, interactive plot visualizations, and user interface

## TEACHING & PEER MENTORING ENGAGEMENT

**Invited Lecture, CSE 390T, Transfer Seminar, Paul G. Allen School**, Seattle, WA May 2020  
Delivered lecture on research opportunities in Allen School and UW, and about research-based careers

**Peer Mentor, Big/Little Program, UW Association for Computing Machinery (ACM)**, Seattle, WA Apr – June 2020  
Familiarized a newly admitted CSE student with departmental offerings and student experience in a mentoring partnership

**Peer Mentor, Mentor Power for Success Program (MPFS), UW Office of Minority Affairs & Diversity (OMA&D)**, Seattle, WA Sept – Dec 2018  
Provided mentoring to a new UW student from minority background to familiarize with campus experience, academics, and student support services

## ACTIVITIES & LEADERSHIP

**Member, Society of Women Engineers (SWE)**, UW Seattle, WA July 2020 – Present  
Participate in quarterly networking, career development, and student engagement events

**Member, Science & Engineering Business Association (SEBA)**, Seattle, WA June 2020 – Present  
Participate in quarterly networking, mentoring, and community engagement events

**Web Developer, COVID-19 Literature Surveillance Team (LST)**, Seattle, WA May – June 2020  
Worked on software integration to overhaul the navigation of the website

**Secretary, UW Association for Computing Machinery (ACM)**, Seattle, WA Sept 2019 – June 2020

- Elected to represent CSE peers; administered memberships, registrations, and documentations
- Coordinated CSE Research Night 2020 for 150+ undergraduates; co-organized quarterly events

**Abstract Reviewer, UW Undergraduate Research Program (URP)**, Seattle, WA Feb 2020  
Reviewed and edited abstracts of research presentations in the UW Undergraduate Research Symposium

**Program Lead, Mentor Power for Success Program (MPFS), UW OMA&D**, Seattle, WA Sept – Dec 2019

- Provided mentoring training, advising and weekly feedback to mentor-protégé pairs
- Coordinated logistics, and marketing for 8 events per quarter serving up to 60 students at a time

**Project Presenter, UW Engineering Discovery Days**, Seattle, WA April 2019  
Presented projects of Human-Computer Interaction (HCI) to visitors

**Event Organizer, STEM Paths Innovation Network (SPIN) Girls**, Seattle, WA June – July 2018  
Organized Meet & Greet, and Mentoring Circles for program participants

## CONFERENCE PARTICIPATION & TOURS

**ACM Richard Tapia Celebration of Diversity in Computing**, San Diego, CA Sept 2019

- Represented Allen School in workshops and career fair booth
- Attended workshops on resilience, journal publication, and career fair

**Tableau Site Visit, Tableau Software**, Seattle, WA Nov 2018

- Participated in professional development workshop in a cohort of twenty UW students
- Engaged in informational and networking sessions with Tableau engineers, managers, and UW alumni employees

## HONORS & AWARDS

**UW OMA&D Merit Award Scholar**, Awarded: Full academic years of 2018-19, 2019-20, 2020-21  
Received for academic and scholarly accomplishments as an OMA&D student

**Mary Gates Research Scholar**, Awarded: Mar 2020  
Received for undergraduate research engagement with UW CSE NLP Group

**Denice Dee Denton Endowment in CSE**, Awarded: Sep 2019  
Received for commitment to social justice, diversity, and excellence as a CSE student

**UW CSE Tapia Conference Scholarship**, Awarded: June 2019  
Received travel and lodging funding to participate in Tapia conference from Allen School

**Ronald E. McNair Scholar**, Awarded: May 2019  
Selected for demonstrating strong academic potential for graduate education

**UW OMA&D Exemplary Mentor Award**, Awarded: Mar 2018  
Received for outstanding contribution as a peer mentor in the MPFS program

## ADDITIONAL EXPERIENCES

**Customer Service Associate, Barnes & Noble, Inc.**, Seattle, WA Sept 2017 – Mar 2018

- Collaborated in staff team to finalize weekly store strategies and sales targets
- Assessed sales activity, transactions/reservations, organized product supplies

**Courtesy Clerk, PCC Natural Markets**, Seattle, WA Feb – April 2017

- Assisted customers in product selection, bagged items and helped in carrying out
- Packaged and organized product supplies collaborating with 25+ store teammates
- Coordinated early-hours and after-work cleanliness and safety check