

# Sophie Lancaster

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## EDUCATION

<b>Northwestern University</b>	Evanston, IL
Master of Science in Engineering Design Innovation	December 2020
<b>University of Notre Dame</b>	Notre Dame, IN
Major: Bachelor of Science in Computer Science	May 2019
Minor: Engineering Corporate Practice	GPA 3.64/4.00, <b>Honors:</b> Upsilon Pi Epsilon, Dean's List Spring 2018
<b>Notre Dame London Program</b>	London, England
Studied Integrated Business and Engineering and Sustainability	Summer 2016

## INTERNSHIP AND RESEARCH

<b>Verizon</b>	Ashburn, Virginia
IT Data Analytics Intern	June 2018-August 2018
<ul style="list-style-type: none"><li>Developed a more efficient pricing process by utilizing Python and Verizon's Enterprise data tools</li><li>Automated the comparison of external invoices and internal billing data using Python screen scraping</li></ul>	
<b>National Science Foundation</b>	Budapest, Hungary
Summer Researcher, International Research Experiences for Students (IRES)	May 2017-August 2017
<ul style="list-style-type: none"><li>Researched machine learning and neural networks using TensorFlow and Python at the Pázmány Péter Catholic University under the leadership of András Horvath and Michael Niemier</li><li>Collaborated with a research partner to investigate the implications of removing the fully connected layer from convolutional neural networks (CoNNs) and implementing locality-sensitive hashing in CoNNs</li></ul>	

## WORK EXPERIENCE

<b>Department of Computer Science and Engineering</b>	Notre Dame, IN
Teaching Assistant	August 2018-May 2019
<ul style="list-style-type: none"><li>Performed academic tutoring, provided assistance to professor, and monitored assessments for CSE 20232 (C/C++ Programming) and CSE 30332 (Programming Paradigms)</li></ul>	
<b>Office of Outreach and Engagement Recruitment</b>	Notre Dame, IN
NDignite Connection Program Assistant	August 2017-May 2019
<ul style="list-style-type: none"><li>Assisted with NDignite Connection which is a leadership program aimed specifically at top-performing students in grades 7 and 8 by providing feedback to students and by helping to create the curriculum</li></ul>	

## PROJECT EXPERIENCE

<b>Department of Computer Science and Engineering</b>	Notre Dame, IN
Human Computer Interaction, team member	January 2019-May 2019
<ul style="list-style-type: none"><li>Created a web application so that our target users could find recipes and plan meals more efficiently</li></ul>	
Social Sensing, team member	January 2018-May 2018
<ul style="list-style-type: none"><li>Generated a model that aggregates multiple types of data to predict the Best Picture winner of the Oscars using Python, the genetic algorithm and a random forest classifier</li></ul>	

## LEADERSHIP & ACTIVITIES

<b>Girls Who Code</b>	Notre Dame, IN
Club Member	August 2018-May 2019
<ul style="list-style-type: none"><li>Taught girls at Penn High School how to code by guiding them through the creation of a Python chatbot</li></ul>	
<b>Society of Women Engineers (SWE)</b>	Notre Dame, IN
Tech Team Co-Leader	August 2017-May 2018
<ul style="list-style-type: none"><li>Partnered with the community of South Bend to bridge the digital divide by installing solar-powered WiFi pavilions in underserved areas of the city</li><li>Led the tech team by presenting previous year's project at national SWE conference, filling out group paperwork, setting up meetings with industry partners, and facilitating teamwork at group meetings</li></ul>	

## SKILLS

Computer: Microsoft Office, Unix, C/C++, Python, TensorFlow, Scheme, Java, JavaScript, x86, PHP, HTML, SQL  
Language: Sufficient in Spanish  
Interests: Traveling, cooking, fitness, socializing, family time, music