Sophie Lancaster

Email: slancas1@nd.edu | **Website:** slancas1.github.io | **Cell:** (574) 453-8530
Address: 907 Sunday Lane Winona Lake, IN 46590

EDUCATION

University of Notre Dame — Notre Dame, IN
Major: Bachelor of Science in Computer Science — May 2019
Minor: Engineering Corporate Practice — GPA 3.62/4.00, Honors: Dean's List Spring 2018
Notre Dame London Program — London, England
Studied Integrated Business and Engineering and Sustainability — Summer 2016

INTERNSHIP AND RESEARCH

Verizon — Ashburn, Virginia
IT Data Analytics Intern — June 2018-August 2018
- Developed a more efficient pricing process by utilizing Python and Verizon's Enterprise data tools
- Automated the comparison of external invoices and internal billing data using Python screen scraping

National Science Foundation — Budapest, Hungary
Summer Researcher, International Research Experiences for Students (IRES) — May 2017-August 2017
- 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
- 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

WORK EXPERIENCE

Department of Computer Science and Engineering — Notre Dame, IN
Teaching Assistant — August 2018-Present
- Performed academic tutoring, provided assistance to professor, and monitored assessments for CSE 20232 (C/C++ Programming)

Office of Outreach and Engagement Recruitment — Notre Dame, IN
NDignite Connection Program Assistant — August 2017-Present
- Assisted with NDignite Connection which is a leadership program aimed specifically at top-performing students in grades 7 and 8
- Provided feedback and created curriculum for the students participating in the program

PROJECT EXPERIENCE

Department of Computer Science and Engineering — Notre Dame, IN
Social Sensing, team member — January 2018-May 2018
- 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

Theory of Computing, team member — January 2018-May 2018
- Created a grep application that matches strings including backreferences then shows that including backreferences makes this application NP-complete

LEADERSHIP & ACTIVITIES

Society of Women Engineers (SWE) — Notre Dame, IN
Tech Team Co-Leader — August 2017-May 2018
- Partnered with the community of South Bend to bridge the digital divide by installing solar-powered WiFi pavilions in underserved areas of the city
- 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

SKILLS

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