DIANA KOWALSKA



EDUCATION

University of Illinois at Urbana-Champaign

B.S. Mathematics and Computer Science

December 2020

SKILLS

Programming Languages: Java, Python, JavaScript, Haskell, C, C++

Libraries: React, numpy, pandas

Tools: git, emacs, vim, org-mode, LATEX

Human Languages: English, Polish, Italian, Spanish

EXPERIENCE

Software Engineer (IT Development Program)

John Deere

January 2021 — Present

Moline, IL •

- Design, develop, and implement large-scale Java application
- Create, modify, and maintain frontend using JavaScript and ReactJS
- Write robust unit, integration, and end-to-end tests
- Maintain code integrity and security using tools including SonarQube

Undergraduate Course Assistant

University of Illinois at Urbana-Champaign

January — December 2020

Champaign, IL •

- Refined in-class activities following POGIL (Process Oriented Guided Inquiry Learning) process
- Assisted with guiding 2 discussion sections of around 100 students through the POGIL activities using POGIL roles
- Aided students with programming assignments and theoretical concepts during weekly office hours

Undergraduate Research Intern

Jelinek Summer Workshop on Speech and Language Technology

June — August 2017

Pittsburgh, PA •

- Designed and carried out an experiment on human subjects to discover how priming affects the accuracy of human online diarization
- Manipulated files from large corpora of telephone conversations to use as data (Bash Script)
- Analyzed suitability of probabilistic models to select the best candidate for representing the results (R)
- Worked on Enhancement and Analysis of Conversational Speech Team, led by Dr. Mark Liberman, University of Pennsylvania
- Collaborated with grad students and senior researchers from team to learn R and Bash, develop the plan for my experiment, and review my weekly progress

PROJECTS

ClassTranscribe Transcriptions

August — December 2019

- Contributed to university-sponsored lecture video hosting website designed to improve learning for diverse students
- Gathered background information about education research and transcriptions from professors and papers
- Managed group of student transcribers who manually correct machine-generated transcriptions
- Compared corrected transcriptions to originals based on various learning criteria (Python Pandas) (SQL)