# **TESSA NEWMAN-HEGGIE**

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### **EDUCATION**

#### **Carleton College**

Northfield, MN

• Bachelor of Arts in Computer Science and Linguistics; Minor in French

(Anticipated) June 2021

- GPA: 3.89; Dean's List (2018-2019, 2017-2018)
- Relevant Coursework: Data Structures, Programming Languages, Social Computing, Math of Computer Science, Calculus II, Software Design, Computability and Complexity, The Hardware/Software Interface
- Study abroad: Center for University Programs Abroad (Paris, France; Rabat, Morocco) March June 2019

#### PROFESSIONAL EXPERIENCE

**Software Engineer Intern (Remote), Shift Interactive, West Des Moines, Iowa (Remote)** 

June – August 2020

- Built full-stack Ruby on Rails Applications remotely with an engineering team employing Agile and TDD
- Performed in the top 50% of company engineers based on several productivity and communication measures.
- Executed development of new website features based on client feedback.

Research Intern, Computer Science Laboratory at Université Paris Sud, Orsay, France

*June – July 2019* 

- Designed an NLP system in Python for a chatbot and created 4000+ unique English phrases to train a virtual patient Lifelong Learning AI system used by medical school students around the world.
- Enhanced user experience of supervisors' chatbot by testing software and providing written feedback.

## **TECHNICAL PROJECTS**

# Software Engineering Project Lead, Hack 4 Impact (club)

September 2020 - present

• Design and build a full stack app for the Movemeant Foundation with a team of fellow students using ReactJS

#### **Ruby for Good (Remote Conference)**

September 2020

- Developed full-stack Ruby on Rails open source applications for non-profit companies with a team of engineers
- Set up Pundit policy checks and other backend configurations for the Chicago Tool Lending Library website

#### **CS257: Software Design**

January – March 2020

- Built a website and API that retrieved information from a database, using HTML, CSS, SQL, Python and Flask
- Employed test driven development and Agile principles while collaborating with teammates to meet deadlines

#### **CS251: Programming Language Design and Implementation**

September – November 2019

- Built a C interpreter for Scheme, including extensive testing and features that enhance user experience.
- Collaborated with a team to solve complex coding problems to meet multiple deadlines.

#### ADDITIONAL EXPERIENCE

#### Computer Science Department Lab Assistant, Carleton College

September 2020 – present

• Guide computer science students through coding projects and optimize code design

#### Computer Science Student Departmental Advisor, Carleton College

September 2020 - present

• Advise students on Computer Science classes by holding weekly office hours.

#### New Student Week Leader, Carleton College

September 2018 and 2019

• Facilitated group discussions and presentations on diversity, consent and sexuality, and mental wellbeing

#### **SKILLS**

**Proficient in**: Ruby on Rails, Python, C

**Experience with:** Javascript, ReactJS, Scheme, Java, AWS, HTML, CSS, Bootstrap, Flask, Django **Technical Platforms**: Postgres, SQL, CircleCI, Atlassian Jira, GitHub, IntelliJ, Heroku, Github Pages