

# Amelia Santrach

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## **SUMMARY**

Current Graduate Student studying Computer Science at Washington University in St. Louis, with undergraduate degrees in Physics and Mathematics from Drake University. Experience with technical support, database management, and website design and customer service.

## **EDUCATION**

**Washington University in St. Louis**, St. Louis, MO  
Graduate student in Computer Science.

Expected Graduation: May 2019

**Drake University**, Des Moines, IA  
Majored in Physics/Math, and Music minor (bassoon). 3.28 GPA

2012-2016

## **RELEVANT COURSES**

Numerical Analysis, Internet of Things, Data Analysis and Algorithms, Parallel and Concurrent Programming, Java, C++, Discrete Mathematics, Digital Logic, Technical Writing, Electricity and Magnetism, Circuits, Signals and Systems, Statistics, Differential Equations, Linear Algebra, Complex Mathematics, Quantum Physics, Mechanics, and Thermodynamics.

## **RELATED EXPERIENCE**

**Computer Explorers**, Minneapolis, MN  
*Teacher,*

June 2017- August 2017

Taught a variety of Java classes to elementary and middle school students. Examples were Java Game Coding, Hacking Java Games, and Minecraft Modding.

**Public Health Solutions**, Minneapolis, MN  
*Technical Intern,*

May 2016- August 2017

Maintained computers for employee use at group homes, updated computers, website design and management, and database design and management.

**Drake University Physics Department**, Des Moines, IA  
*Research Assistant,*

August 2014 – May 2016

Research Assistant under the watch of Athan Petridis on the Dynamic Mass Renormalization of Electromagnetically Self-Coupled Fermion Fields with Statistical Regularization. Produced runs under particular parameters and fits for results, and analyzed data.

**Drake University Math Lab**, Des Moines, IA  
*Tutor*

February 2014 – May 2016

## **SKILLS**

Languages: Java, C++, HTML, Javascript, and Python.  
Operating Systems: Unix, macOS, Linux, and Windows  
Databases: Microsoft Access

## **ACTIVITIES AND AWARDS**

- Dean's List Spring 2016
- Vice President of Amnesty International
- Member of Sigma Alpha Iota
- Member of the Society of Physics Students
- Swimming and Diving Team Captain
- Member of Drake University Band