SAM ARONSON

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EDUCATION

Haverford College: Haverford, PA

Expected Graduation: May 2022

Computer Science and Philosophy Major

GPA: 3.8/4.0

Relevant Coursework: Compiler Design, Principles of Programming Languages, Linear Algebra, Scientific Computing, Intermediate Microeconomic Analysis

TECHNICAL EXPERIENCE

Teaching Assistant, Haverford College Computer Science Department

June 2020-Present

Assisted students in learning basic Computer Science and computational skills as a Lab TA in the Computer Science department for students in ECON300. Worked to develop lab curriculum in python for course over the summer and semester.

Machine Learning Researcher, University of Minnesota

Summer 2017

Predicted risk of cardiotoxicity in breast cancer patients using supervised machine learning algorithms at the Institute for Health Informatics. Developed model using R and extraction from MySQL databases. Selected to present work at the American Medical Informatics Association's Annual Meeting.

FIRST Robotics Competition Team Co-Captain, Breck School

2016-2018

Led a team of 30 students to develop a robot codebase in Java while interfacing with multiple separate APIs to autonomously complete various challenges. Each season programmed a codebase of 5000+ lines using an object-oriented paradigm. Implemented advanced version control using git. Assisted in managing annual budget in excess of \$50,000

SELECTED PROJECTS

Contact Journal August 2020

Created web app concept in ReactJS to assist private journaling their close contacts for COVID19 contact tracing.

Tiger Compiler Spring 2020

Implemented compiler for the implicitly typed Tiger language in C++ using bison and flex. Explored concepts such as implicit typing and lexical scoping using techniques such as object-oriented programming and recursive design.

Tri-College Hackathon Winner, Haverford Innovations Program Hackathon Winner

October 2019

Developed a bilingual game concept in 24 hours using the Unity platform to teach young children the fundamentals of financial literacy. Received first prize and people's choice award.

Additional Experience

BLAST Chief Technician, Haverford College

2020-Present

Co-lead group providing technical sound and lighting needs to student groups on campus. Manage staff of 25+ and provide technical training sessions. Oversee major events including annual music festival Haverfest.

Customs Person Committee Co-Head, Haverford College

Spring 2020-Fall 2020

Trained and advised students who live with first years to support their college transition. Developed training curriculum and adapted program to meet the challenges of COVID-19. Additionally, organized class-wide events during orientation.

Customs Person, Haverford College

2019-Present

Served as a Customs Person for 20 first-year students facilitating orientation and living with them to create an inclusive and welcoming hall environment. Managed resident concerns and resolved conflicts between first years.

Admissions Office Fellow, Haverford College

2019-Present

Lead tours on behalf of the admissions office. Welcome prospective families to campus physically and virtually.

Camp Counselor/Advocate, Camp TEKO

Summers 2018-2019

Provided a positive summer camp experience to campers 6-12 in both day and overnight camp settings. Planned and led programming. Worked one-on-one in an overnight setting with a camper with high emotional needs.

Co-Captain Intramural Tennis, Haverford College

2019-Present

TECHNICAL SKILLS

Languages (In order of proficiency): Python, Racket, Javascript, C++, Java, SQL, PHP Technologies: git, Linux (ubuntu), MacOS, ReactJS, nodeJS, MySQL, bison, flex