# Sina Bakhtiari

sina.bakhtiari@fulbrightmail.org | (316) 993-6757

# **EDUCATION**

# **BOWDOIN COLLEGE**

**BA IN MATHEMATICS** 

Minor in Computer Science May 2019 | Brunswick, ME Cum. GPA: 3.8 / 4.0 Major GPA: 3.95 / 4.0

# ST. OLAF COLLEGE

BUDAPEST SEMESTERS IN MATHEMATICS (BSM) Spring 2018 | Budapest, Hungary

# COURSEWORK

# **BOWDOIN**

- · Partial Differential Equations
- · Computational Bayesian Statistics
- · Abstract Algebra
- · Quantum Bayesian Inference
- · Real Analysis
- · Linear Algebra
- · Number Theory & Cryptography
- · Artificial Intelligence
- · Principles of Programming Languages
- · Algorithms
- · Data Structures

#### **BSM**

- Combinatorics
- · Quantum Information/Computation
- · Statistical Methods

# **SKILLS**

#### **PROGRAMMING**

Proficient:

Python

Familiar:

Java • Kotlin • LaTEX • R • Ruby • Rails • Mathematica

#### **COMPUTER**

Microsoft Office

#### **LANGUAGE**

English • Farsi • Spanish

# **AWARDS**

# FULBRIGHT FELLOWSHIP | ENGLISH TEACHING ASSISTANT

2019-2020 | Madrid, Spain

- Won a highly coveted fellowship funded by the U.S. State Department to act as a cultural ambassador and as a teacher in a Spain for one year.
- Worked with college students at La Universidad Camilo José Cela, teaching English and programming, while also exposing them to facets of U.S. culture.

# RESEARCH AND WORK EXPERIENCE

# WICHITA STATE. UNIVERSITY ROBOTICS LAB | RESEARCHER Summer 2018 | Wichita, KS

- Worked with a graduate student researching how machine learning models using near-infrared spectral data can be implemented for robotic grip.
- Used techniques from publications to preprocess near-infrared spectral data so it could be optimally used in classification models.

# **BOWDOIN COLLEGE MATH DEPARTMENT | RESEARCHER**

Summer 2017 | Brunswick, ME

- Explored various approaches to modifying the existing continued fraction algorithm in order to optimize convergence of terms
- Expanded upon sparse previous exploration in this topic and discovered new methods for creating continued fractions, improving convergence.

#### **BOWDOIN COLLEGE CLT** | TEACHING/LEARNING ASSISTANT

January 2017 - May 2019 | Brunswick, ME

- Helped the professor teach students at the chalkboard in a hands-on, intimate classroom setting.
- Assisted students outside of class by reinforcing core concepts, helping with homework, and helping to study for exams.

#### **BOWDOIN COLLEGE LIBRARY** | SCIENCE LIBRARY ASSISTANT

August 2016 - May 2019 | Brunswick, ME

• Helped students navigate and utilize the multitude of library resources.

#### MATHNASIUM | INSTRUCTOR

May 2013 - August 2016 | Wichita, KS

- Taught students of all ages in topics ranging from basic arithmetic up to calculus.
- Used data from progress evaluations to quantify student improvement and effectively communicated the meaning of these results with parents.

# **ACTIVITIES AND INTERESTS**

# **TECHNOVATION GIRLS | TEAM MENTOR**

January 2020 - April 2020 | Madrid, Spain

• Mentored a team of young women as they made an app that provides university and career information for Spanish youth.

# **BOWDOIN SKETCH COMEDY** | WRITER/PERFORMER

August 2017 - May 2019 | Brunswick, ME

• Worked on a team to write, stage, and perform in a comedy show at the end of each semester involving both filmed, and live sketches.