

Daniel Firebanks-Quevedo

📧 thefirebanks | ✉️ dfireban@oberlin.edu | 📞 202-294-9862 | 🌐 firebanks

EDUCATION

OBERLIN COLLEGE (OC)

BA IN COMPUTER SCIENCE

Expected May 2020 | Oberlin, OH

Minor in Mathematics

Concentration in Cognitive Science

GPA: 3.52 / 4.0

UNITED WORLD COLLEGE USA

May 2016 | Montezuma, NM

International Baccalaureate

COURSEWORK

UNDERGRADUATE

Advanced Algorithms

Multivariable Calculus

Programming Languages

Systems Programming

Data Computing and Visualization

Data Structures

Discrete Mathematics

Fall 2019:

Economics and Computation

Linear Algebra

Human Computer Interaction

ONLINE

Machine Learning

Game Theory

Web Application Development

SKILLS

PROGRAMMING

Comfortable:

Python • Java • C++

• Javascript • Scheme

• Node.js/React.js • \LaTeX

Familiar:

C • C# • R • MongoDB • Shell • SQL

LANGUAGES

Spanish (Native) • English (Proficient)

• French (Conversational)

INTERESTS

Jazz/Classical Guitar • Percussion

• Stand-up comedy • Photography

• Close-up Magic • Latin and Ballroom

Dancing • Cognitive Neuroscience

• Cooking • Behavioral/Development

Economics • Outdoor recreation

EXPERIENCE

PUBLIC COMPANY ACCOUNTING OVERSIGHT BOARD, Washington D.C

ECONOMIC ANALYSIS INTERN | Jun 2016 - Aug 2016

- Building tools that automate cleaning, merging, and query-based retrieval of financial/accounting data for text analysis and risk prediction.
- Wrote a parser in C# to extract text while maintaining logical structure from non-standardized HTML documents, increasing accuracy from 47% to 72%.

COMPUTER SCIENCE (CS) DEPARTMENT, Oberlin College

TEACHING ASSISTANT | Aug 2017 - May 2018

- Engaged in weekly lab tutoring sessions for groups of 20-25 students, by assisting them in developing software design proficiency, identifying/resolving bugs, and peer programming.
- Classes: *Introduction to CS*, *Data Structures and Systems Programming*.

CENTER FOR INFORMATION TECHNOLOGY, Oberlin College

TECHNOLOGY CONSULTANT | Jan 2017 - May 2018

- Provided first-level client services/support to students, faculty and staff by diagnosing software issues and formulating solutions to them.

RESEARCH

COMPUTER SCIENCE DEPARTMENT, Oberlin College

RESEARCH ASSISTANT | *Self-interested multi-agent reasoning in complex systems*

Aug 2017 - Present

- Studying multi-agent systems and reinforcement learning algorithms applied to StarCraft2 (SC2) with **Adam Eck**.
- Created a framework to build intelligent bots through the Python (PySC2) and Java SC2 APIs that uses the Raw Interface of the game.
- Built basic bots for 5 of the test environments provided by DeepMind.

LEAD RESEARCHER | *Ensemble Learning for Offensive Language Detection in Tweets*

Aug 2017 - Present

- Building an ensemble learning model to classify hate-speech and offensive language in tweets, composed of:
 - A Bayesian structure, an LSTM Recurrent Neural Network and a Voting Classifier module based on word embeddings and a lexicon frequency score.
- Designed and implemented a weighted voting system for the outcomes of the methods mentioned above.
- Wrote a curricular unit in algorithmic bias for the Machine Learning class.

SUMMER RESEARCHER | *Sentiment Analysis of Viral Tweets*

Jun 2017 - Jul 2017

- Analyzed 300,000 tweets from a large group of scientists for changes in sentiment and its possible effects on virality.
- Used Python and R to implement machine learning (Naive Bayes, SVM, Max. Ent) and natural language processing techniques.

ACTIVITIES AND LEADERSHIP

Nov 2017 - Present

Computer Science Majors Committee (Member)

Aug 2016 - Present

International Student Organization (President)