Daniel Firebanks-Quevedo

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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:

Pvthon • Java • C++

• Javascript • Scheme • LATEX

Familiar

C • C# • R • Node.js/React.js

• 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

Fconomics • Outdoor recreation

EXPERIENCE

PUBLIC COMPANY ACCOUNTING OVERSIGHT BOARD, Washington D.C ECONOMIC ANALYSIS INTERN | Jun 2018 - Aug 2018

- 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**.
- Building basic bots for the test environments provided by DeepMind.
- Created a framework to build intelligent bots through the Python (PySC2) and Java SC2 APIs that uses the Raw Interface of the game.

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 apply machine learning (Naive Bayes, SVM, Max. Ent) and natural language processing techniques.

ACTIVITIES AND LEADERSHIP

Nov 2017 - Present Aug 2016 - Present Computer Science Majors Committee (Member) International Student Organization (President)