Alex Karacaoglu

STUDENT · SOFTWARE DEVELOPER
GREATER BOSTON AREA

Email: karacaog@bc.edu   LinkedIn: alex-karacaoglu   GitHub: AlexKaracaoglu   Phone: 774-641-2539

Education

Boston College, Morrissey College of Arts and Sciences   *Chestnut Hill, MA*
BACHELOR'S DEGREE WITH MAJORS IN MATHEMATICS AND COMPUTER SCIENCE   *Aug. 2015 – Exp. May 2019*
- Minor: Economics
- Dean's List (Spring 2016, Fall 2016, Spring 2017, Fall 2017)
- Selected Coursework: Abstract Algebra, Computer Organization, Computer Security, Computer Systems, Cryptography, Differential Geometry, Dynamical Systems, Logic, Machine Learning, Probability, Real Analysis, Statistics, Theory of Computation, Topology

Work Experience

Liberty Mutual Insurance   *Boston, MA*
SOFTWARE DEVELOPMENT INTERN   *May 2018 – Present*
- Will work as part of the US Consumer Markets IT Financial Services Team
- Work TBD…

Boston College, Department of Learning Resources for Student Athletes   *Chestnut Hill, MA*
COMPUTER SCIENCE TUTOR   *Jan. 2017 - Present*
- Hold weekly small-group tutoring sessions
- Intro to Computer Science I (Python) – Spring Semester 2018

Boston College, Computer Science Department   *Chestnut Hill, MA*
COMPUTER SCIENCE TEACHING ASSISTANT   *Aug. 2017 - Present*
- Hold weekly office hours as well as grade and provide feedback on problem sets
- Randomness and Computation (Matplotlib, NumPy, Python) – Spring Semester 2018
- Intro to Computer Science II (Algorithms, Data Structures, Java) – Fall Semester 2017

InterSystems Corporation   *Cambridge, MA*
PRODUCT SUPPORT INTERN   *May 2017 – May 2018*
- Provided functionality and security enhancements to the Hazard Log, a clinical risk application that is used with the TrakCare EMR
- Designed an algorithm to provide analysis on the effectiveness of the company's TrakCare support teams in upholding service level agreements (SLAs) with customers. Used this to embed a new analytics dashboard into the TrakCare Resolution Center to provide management new insights into the data

Leadership

TEDx Boston College
EXECUTIVE BOARD – CURATOR/SPEAKER OUTREACH AND DEVELOPMENT   *Oct. 2017 – May 2018*
- Responsible for contacting, interviewing, selecting and preparing speakers for a TEDx event at Boston College in the Spring of 2018

4Boston Volunteers of Boston College
EXECUTIVE BOARD – HEAD OF OPERATIONS   *Sep. 2015 - Present*
- Serve as an activities coordinator at the Mattapan Early Elementary School and lead a group of 17 students who also serve there
- As part of the executive board, I am the operations lead where I organize and oversee the entire club of over 700 students

Projects

Automated Cryptanalysis of a Monoalphabetic Cipher
- Used a stochastic optimization algorithm to exploit insecurities of this encryption method and return a decrypted text

GeomPy
- Differential Geometry and Dynamical Systems Library built on top of NumPy and SymPy

Technical Skills

Programming Languages:	C, Caché ObjectScript, Java, Python
Web Development:	AngularJS, Bootstrap, CSS, HTML, JavaScript
Database:	InterSystems Caché, SQL
Other:	GitHub, LaTex, Mathematica, RESTful APIs