TRUNG T. NGO



EDUCATIONs

CLARK UNIVERSITY, Worcester, MA

B.A in COMPUTER SCIENCE | B.A in MATHEMATICS (Math + CS GPA: 3.5)

August 2014 – May 2018

HARVARD EXTENSION SCHOOL, Boston, MA

Course: Advanced Mobile (iOS) Programming in Swift

June 2016 - August 2016

SKIT.I.s

+ Programming

- Proficiency: Java | Swift | JavaScript | HTML5 (Pug) | CSS3
- Familiarity: Python | C | C++ | C# | Matlab | R | Bash (shell) | Haskell | Go
- + Database: MySQL | NoSQL | PostgreSQL | Hadoop
- + **Development tools:** XCode | Intellij | Brackets | Eclipse

| Visual Studio | Unix/Linux | Vim | UML

+ Libraries & Platforms

- Web Technologies: Bootstrap | JQuery | React.js | Node.js |
 AWS | Web Services (XML, HTTP) | Spring
- Library/Framework: iOS | UIKit | NumPy | Matplotlib |
 Google Map | Foursquare | ASP.NET | OpenCV
- *Miscellaneous*: [*Version Control*: Git | Bitbucket], [*Testing*: JUnit, A/B], [*UX Design*: Moqups | Adobe Illustrator, Sketch]

INDUSTRY/WORK EXPERIENCEs

PaperAirplane, Boston, MA

Work Experience/ May 17- Oct 17

Software Engineer Intern - iOS & Full-stack Web Development

- Designed and tested iOS prototypes featuring geo-fencing in Swift, fetching data from Google Map & Foursquare APIs
- Helped built the company's commercial web app (preliminary version) for partners to register their venue, ads and future events.
 - Front-end: Designed UI with HTML5/CSS3, Bootstrap, and JQuery, components with React. is with some charting in D3. is
- **Back-end:** Built the web server side in **Node.js**, with the database in **Mongo DB**. Used testing with **Mocha and Chai,** and automated the workflow with tools like **Grunt** and **npm** scripts.

Boston University, Boston MA

Published Research / May 16 – August 16

Undergraduate Research Assistant/Programmer

- Designed features of *image filtering and social media sharing* in **C#** based on **EmguCV** to the assistive desktop app called, **Camera Canvas**, integrated with the mouse-replacement video-input interface, **Camera Mouse**, to help the disabled draw and filter photos
- Published the research work on Springer (over 400 downloads so far) and presented it at HCI International Conference 2017

Clark University

Campus Job/ January 16 - Now

Computer Science/Mathematics Teaching Assistant

- Assist the professor, for the course of **CS**: **Data Structure**, **Automata Theory** & **Math**: **Discrete Mathematics**, **Multivariate Calculus**, to grade the set of assignments and take-home projects for more than 30 students
- Hold weekly office hour for helping students solve coding and math problems and review for the tests

ADDITIONAL PROJECTS

Harvard Extension School | iOS app (beta version) - Soccerify

Independent / June 16 - August 16

- Designed a user-interface and data model for the *iOS app* in Swift, called Soccerify, the soccer media app to check match results in time and rate/ comment about them with others.
- Designed with **MVC pattern**, designed UI storyboard, retrieved data from **Soccerama.pro**, and integrated it with **UIKit**, **MapKit**, and a **Cocoa Touch** framework (**AFNetworking**).

Clark University | GMM for a simple Speech Recognition test

Independent/December 16 - December 16

- Optimized the Gaussian Mixed Model (GMM) in Python to apply into simple speech recognition tests
- Collected a set of audio files (.wav) to parse them into the feature file (.feat) as input for testing

EXTRACURRICULARS/ AWARDS

+ Human Computer Interaction International 2017 Conference in Vancouver- Presentation Participant + 2015 – 2017 Putnam Competition – School Participant

+ Clark University Mathematics Association - Treasurer

RELATED COURSEWORKS

COMPUTER SCIENCE

 Algorithm, Analysis of Programming Language, Computer Organization and Assembly, Analysis & Design of Algorithm, Computer Networking, Machine Learning, Operating System & Numerical Analysis, [currently]: Distributed System, Theory of Computation, Database System Design **MOOCs**: Software Debugging, Software Testing (*Udacity*), Machine Learning (*Coursera*), [currently]: Database Design (*Udemy*), AWS & DevOps Essentials Trainings (CERTS School)

MATHEMATICS: Linear Algebra, Probability & Statistics, Stochastic Modeling, Differential Equation

¹As in JANUARY 2018