# MATTHEW (JOONHO) MOON

2338 Bancroft Way, Berkeley, CA 94704 ■ mattmoon@berkeley.edu ■ (415) 900-6536

#### **EDUCATION**

#### University of California, Berkeley

College of Letters and Science | B.A. Computer Science and B.A. Economics

Relevant Coursework: Efficient Algorithms and Intractable Problems, Machine Structures, Data Structures, Structure and Interpretation of Computer Programs, Discrete Mathematics and Probability Theory, Linear Algebra and Differential Equations, Multivariable Calculus

### **PROJECTS**

BearMaps | Java August 2019

- Implemented the backend for a map application, which focuses on the campus town of Berkeley, with zoom and drag functionality
- Calculated and displayed optimal routing between locations, by utilizing A\* search algorithm

Built and integrated an autocomplete feature to suggest locations from inputted search terms, using trie data structure

Created a version-control system using serializable objects that closely mimics Git from scratch

Designed internal file structures and other functionalities such as backup commits, merge, branches and remote usage

Enigma | Java June 2019

Implemented an encryption/decryption machine, with heavy usage of object-oriented programming and inheritance

Emphasized on modular code and polymorphism, focusing on reusability of the code and proper logic implementation

DaniBio | Ruby on Rails, HTML

Implemented a website that assists biology graduate students with their labs, such as DNA translation to RNA sequences

Created and designed the front end of the website with heavy emphasis on user experience, for better lab efficiency

**Scheme Interpreter** | Python April 2017

Developed an interpreter for a subset of Scheme programming language using Python, parsing string inputs for various cases

Implemented based on read-eval-print loop, utilizing tokenizing, parsing, evaluating commands and parsing

Republic of Korea Army | 5th Corps Logistics Support Brigade 15th Supply Battalion

August 2017 - May 2019

**July 2019** 

May 2017

Expected Graduation: May 2021

Logistics Specialist, Squad Leader, Sergeant

- Analyzed the deployment flow of class II items, increased storage efficiency by 15%, and commanded a squadron of 10+ soldiers during five axis-wide trainings, boosting time efficiency of class II and class IV items deployment by 20+%
- Protocoled bimonthly meeting between battalion commanders of the 70th BSB Commander from the US Army and the 15th BN Commander, while preparing necessary operations-related slides and other documents and scripts necessary for the meetings
- Commanded a squadron of 10+ soldiers during multiple trainings such as boosting time efficiency of class II items deployment by 20%
- Founded a station-wide "Learning English in Pocheon" ESL program for soldiers, to accelerate communication with the US Army

#### X-Lab Inc. | Berkeley, California

August 2016 - December 2016

Business Operation\_Intern

- Marketed Spendwallet, a payment solution device that works with a combination of a patented magnetic flux emulation technology and near field connection technology, through various social media platforms, raising \$170,000+ from crowd-funding websites
- Assisted the head of Business Development in negotiation of a partnership deal, resulting in enhancement of customer experience
- Developed and sourced a list of 30+ Venture Capital firms in Northern California through active online research

# Seoul Credit Rating & Information | Seoul, South Korea

June 2016 - July 2016

Fintech Intern

- Analyzed personal financial information, such as individual credit information, and made reports for regulatory institutions
- Led a project on the company's establishment of a new cyber security branch by communicating with a potential benchmark company
- Conducted research on growing fin-tech companies to assist in investment pitches to board members

#### LEADERSHIP & ACTIVITIES

## Korean American Student Association (KASA) | Berkeley, California

January 2016 - May 2017

Fundraising Chair, Community Service Chair, Family Head

- Created and managed fundraising events to fund for organization operations, increasing raised funds by 15% than previous years
- Led community service opportunities for 20+ KASA members and officers and raised \$700+ for charity funds
- Marketed Korean American Student Association to incoming Freshmen and increased memberships by 50+

## SKILLS & INTERESTS

Technical: Python, Java, C, SQL, Ruby on Rails, HTML, Adobe Photoshop, Microsoft Office Suite

Languages: Korean (Native), Chinese (Conversational)

Interests: Weight Training, Soccer, Rugby, Books, Stock Investing, Traveling (35+ countries)