SANGHYEON AHN

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Incoming Software Engineering Intern at Facebook

EDUCATION

Johns Hopkins University **Baltimore, MD**

Bachelor of Science, in Applied Mathematics and Statistics, Computer Science Expected: May 2018

- Cumulative GPA: **3.92**/4.00 (a member of UPE honor society)
- Relevant Coursework: Machine Learning, ML: Data to Models, Data Mining, Parallel Programming, Information Retrieval, Data Science, User Interface & Mobile App, Algorithms, Data Structures, Statistics, Probability, Optimization, Linear Algebra

EXPERIENCE

Moloco **Seoul, South Korea**

Software Engineering Intern Sept 2017 - Present

- Collaborated in building a mobile DSP infrastructure scaled for 1000 ad campaigns on both frontend (AngularJS) and backend (Go).
- Launched an Android, iOS, Unity, and JavaScript SDK for mobile event tracking using RESTful API (Moloco VAN).
- Built an internal chat bot for campaign management with ad-hoc features such as summarizing KPIs from cloud database (BigQuery).
- Automated and simplified over 35% of the campaign operation work flow by scripting tools such as price model generator.

Department of Computer Science, JHU **Baltimore, MD**

Research Assistant Sept 2016 – May 2017

- Developed various machine learning based prediction models using raw data scraped from the MLB Gameday website using R and Python.
- Designed unique features, automated the model training process, and simplified cross-validation and ROC analysis for evaluations.
- Created an API for predicting the *next pitch ball type* using pre-trained models for MLB team managers.

Ex Parte **Washington, DC**

Data Engineer Dec 2016 – April 2017

- Designed a baseline prediction model for legal analytics in judicial decisions made in U.S. Court of Appeals for the Federal Circuit.
- Built data ETL pipelines for constructing a relational database from world-wide-web, legal documents, and existing databases.

Institute for Data Intensive Engineering and Science **Baltimore, MD**

Research Programmer May 2016 – Aug 2016

- Wrote an optimization program in JavaScript for visualization of a network of multi-dimensional-nodes on HTML Canvas.
- Devised functions for producing optimized coordinates for each node and edge curve point by calculating collisions and noise levels.

PROJECTS

Semester.ly **April 2017 ~ Present**

- Contributed in an open source search engine for 9 universities' course databases based on document vector space modeling using Django.

Food Therapy Recommender **June 2017**

- Constructed a scalable food therapy recommender system based on patients' medical information in collaboration with a medical doctor.

Multimodal Deep Learning for Game Prediction **May 2017**

- Built a binary prediction model using multimodal data sources (statistics, articles, tweets) for sports games with a 60.1% accuracy.

Facebook Sentiment Analysis **April 2017**

- Designed a tool for analyzing and visualizing public sentimental responses to Facebook page posts using LDA, PCA and clustering.

MAVI (Best Healthcare Project Award for HopHacks 2017) **Feb 2017**

- Created an AI mobile application addressing real life problems for visually impaired people through verbal queries and computer vision.

CafeIt **Dec 2016**

- Developed an Android mobile application for local café infrastructure to make the process of ordering coffee efficient and interactive.

LEADERSHIP

Director of Entrepreneurship - *Alpha Kappa Psi (Rho Psi Chapter)* **May 2016 – May 2017**

Course Assistant **Jan 2016 – May 2017**

- Intro to Machine Learning (EN.600.475), Data Structures (EN.600.226), Oral Presentations (EN.661.205)

PROGRAMMING SKILLS

LANGUAGES	Java, Python, Go, JavaScript, SQL, R, C++, C, C#, Objective C, HTML, CSS (in order of proficiency)
LIBRARIES	Scikit-Learn, TensorFlow, SciPy/Pandas, MongoDB, Django, Firebase, OpenCV, AngularJS
ENVIRONMENTS	Git, Google Cloud Platform, AWS, Hadoop, Linux, Android Studio, XCode, Unity, RStudio, VirtualBox