

# Alexander S. Chang

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## EDUCATION

### Johns Hopkins University

*B.S. in Applied Mathematics and Statistics / M.S.E. in Data Science*

**Baltimore, Maryland**

*May 2020 / January 2022*

- **Concentrations:** Statistics and Statistical Learning (B.S.) / Computer Vision (M.S.E.); **Minor:** Economics
- **Relevant Courses:** Machine Learning, Data Mining, Identifying and Capturing Markets, Applied Statistics and Data Analysis, Professional Writing and Communication, Optimization I & II

## RELEVANT EXPERIENCES

### Electronic Arts (EA)

*Data Science Intern*

**Remote**

*May 2020 – Present*

- Participated in cross functional collaboration with engineers and project managers to deploy the Text Analytics Platform, allowing analysts and studios to automate the process of generating actionable insights from Twitter data
- Built topic modeling reports for FIFA Mobile, helping the team improve retention rate by 7.5% and better understand player feedback towards the game content; presented key results to relevant teams and employees up to the VP level
- Developed an algorithm to optimize the number of topic clusters and assess model results using topic coherence and Word2Vec

### Hopkins Extreme Materials Institute

*Machine Learning Researcher*

**Baltimore, Maryland**

*August 2019 – May 2020*

- Collaborated with materials scientists to understand automation use cases and created a project roadmap accordingly
- Trained a Mask R-CNN model to classify melting zones of real time crystal growths in order to provide live, automated user feedback; incorporated metrics such as average precision to evaluate model results in Python
- Improved the output accuracy of the classification model by 2.7% by using k-Fold Cross Validation to reduce training bias

### MongoDB

*Growth Marketing Intern*

**New York, New York**

*June 2019 – August 2019*

- Developed three quantitative segmentations of MongoDB's cloud customers through K-Means Clustering, resulting in strategic recommendations which increased monthly recurring revenue by 9%
- Implemented A/B testing and improved conversion rate to the MongoDB Startup Accelerator landing page by 3.4%
- Generated 10+ data visualization reports for the startup customer segment using Python and Tableau; key insights were used by the Growth Marketing team to effectively position MongoDB Atlas (the fully-managed cloud database) to both paid and free tier users

### EcoMap Technologies, Inc.

*Business Development Lead*

**Baltimore, Maryland**

*June 2018 – August 2019*

- Built a resource mapping startup to help entrepreneurs identify applicable resources for their ventures; received \$70,000+ in funding and finalized letters of intent with 7 local universities in Maryland
- Developed a minimal viable product based on pain points and feedback from 30+ customer discovery interviews; pitched at conferences such as Innov8MD and the DC I-Corps program

## LEADERSHIP & ACTIVITIES

### Alpha Kappa Psi – Professional Business Fraternity

*Consulting Chair and Social Chair*

**Baltimore, Maryland**

*January 2018 – May 2019*

- Spearheaded the Consulting education project by teaching new members the basics of strategy consulting concepts and frameworks
- Led a team of 5 students in crafting data-driven competitor and market analyses for a local startup, increasing engagement by 20%
- Managed over \$5,000 of budget to organize the chapter formal and other social events
- Focused on fostering a collaborative community by increasing average participation rate for social events by 30%

### American Marketing Association

*Director of Outreach*

**Baltimore, Maryland**

*January 2018 – May 2019*

- Introduced the Director of Outreach position to communicate and network with 20+ consulting and marketing companies; hosted alumni panels and business case workshops which improved average attendance by over 20%
- Developed marketing strategies and brand guidelines for Stick it to Sarcoma (SITS) Foundation, a nonprofit organization focused on raising awareness and funds to support cancer research; helped increase funding by 23% and brand awareness by 30%

## PERSONAL PROJECTS

### Detecting Hate Speech in Online Comments

*July 2020 – Present*

- Working under Dr. João Sedoc to develop a hate speech classifier model using BERT in order to predict hate/offensive speech based on user comments under news articles; **goal:** help organizations filter hate speech to increase user satisfaction and retention

### Targeted Job Search Through Recommendations

*June 2020 – August 2020*

- Built an end-to-end job recommendation system as a web application (using Flask and HTML) after web scraping and preprocessing 6000+ Glassdoor job postings; **goal:** help students improve success rate by exploring which job descriptions are a better match

## SKILLS & INTERESTS

- **Technical:** Python, R, SQL, Tableau, MATLAB, Microsoft Excel, PowerPoint, and Word
- **Skills:** bilingual fluency in English and Mandarin Chinese, team-based professional communication, business strategy
- **Interests:** DJing, music production, basketball, hip hop dancing, cooking fusion foods, robotics