SAM BAI

✉ sbai83100@gmail.com ⬡ github.com/sbai83100
in linkedin.com/in/sam-bai/ 🌐 sbai83100.github.io/sambai/

EDUCATION

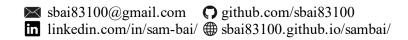**University of Maryland, College Park – College Park, MD**   Expected May 2023
Bachelor of Science in Computer Science   GPA: 3.980
Relevant Coursework   Algorithms, Data Structures, Computer/Network Security, Databases, Data Science, Probability/Statistics

WORK EXPERIENCE

LexisNexis Risk Solutions
Quality Test Engineer Intern   May 2021 – July 2021
- Work on scoring quality assurance initiatives related to analytic testing frameworks and the cloud journey.
- Process big data across a high-performance computing cluster to analyze distribution shifts in over 25,000 records
- Create a dashboard in Python/HTML to display information about shifted attributes to increase efficiency and automation of daily attribute monitoring.
- Collaborate with 8 team members in an Agile framework using Scrum processes to complete JIRA tickets

Iribe Initiative for Inclusion and Diversity in Computing (I4C)
Teaching Outreach Ambassador   January 2021 – Present
- Prepare weekly technology-rich workshops in cybersecurity, UI/UX, and data science for over 100 total participants.
- Design instructional programs in Python to assist over 30 students in developing programming skills and problem-solving.
- Connect and work with over 700 students of underrepresented minorities in computer science to promote diversity in tech.

CodeDay
Software Engineer Intern   June 2020 – July 2020
- Partnered with LexisNexis Risk Solutions to integrate code for analytical monitoring and research on credit scores.
- Created a Python executable using Pandas to compare large-scale datasets and calculate statistical differences to provide enhancements for existing data-based solutions.

International Cultural Bridge Group – Academy of Excellence (AOE)
Teacher, Part-Time   June 2020 – July 2020
- First college student brought on board by organization to teach Java basics to a class of 20 students on a weekly basis.
- Implemented detailed lesson plans and rich class materials reflective of the AP Computer Science A curriculum.

PROJECTS & RESEARCH

Introduction to Data Science
Analysis of Education in Maryland by Counties in 2018   April 2021 – May 2021
- Analyzed differences in education across the 24 Maryland counties using data from the Maryland Department of Commerce.
- Applied linear regression models, residual analysis, and hypothesis testing to determine relationship between per capita personal income and bachelor's degree attainment rate with 95% confidence.

FIRE: The First-Year Innovation and Research Experience
Weather Tunes   August 2020 – April 2021
- Created a mobile app prototype that applies an AI model and uses weather and geolocation APIs for song recommendations.
- Researched relationship between weather and music attributes based on existing knowledge of seasonal affective disorder.

Presentations   FIRE Summit. November 16, 2020. University of Maryland, College Park
                     Maryland Undergraduate Research Day. April 26, 2021. University of Maryland, College Park

LEADERSHIP & STUDENT INVOLVEMENT

Technica   **October 2019 – Present**
Executive Organizer – West Coast Liaison   May 2021 – Present
- Coordinate meetings with 124 directors and organizers to plan for world's largest all-women/non-binary hackathon.
- Lead our west coast expansion initiative to collaborate with schools in California and extend our mission to create a safe, diverse, and inclusive community for underrepresented genders in technology.

Honors College, University Honors *Peer Academic Leader*   **August 2020 – Present**
TerpWushu *Vice President, Secretary*   **January 2020 – Present**
Taiwanese American Student Association *Internal Vice President, Historian, Junior Officer*   **October 2019 – Present**

SKILLS

PROGRAMMING   *Proficient:* Java, Python | *Familiar:* C/C++, R, SAS, HTML/CSS, JavaScript, Git
TECHNOLOGY   GitHub, Minitab, Microsoft Office, Google Suite, Adobe Photoshop/Lightroom/Premiere
GENERAL   Programming, Agile, Technical Writing, Curriculum Development, Public Speaking, Project Management