

BENJAMIN SAENZ

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EDUCATION

UNIVERSITY OF MARYLAND – COLLEGE PARK

B.S. in Computer Engineering/Computer Science

College Park, MD

Expected May 2026

Cumulative GPA: 3.91/4.0 | Dean's List 2022 – Present | Gemstone Research Honors College

Relevant Coursework: Object-Oriented Programming, Data Structures & Algorithms, Discrete Structures, Calculus 1,2,&3

WORK EXPERIENCE

OFFICE OF MULTI-ETHNIC STUDENT EDUCATION

Database Maintenance

College Park, MD

Sep 2022 – Present

- Collected and organized 1,500+ data entries into effective storage systems / databases to promote racial equity
- Corresponded with 100+ students to provide technical support and to improve program resource engagement by 30%

COLLEGE PREP EXCELLENCE ROADMAP ACADEMY

Private STEM & Coding Tutor

College Park, MD

Feb 2023 – Present

- Designed and organized 20+ lesson plans based on the client's needs and topics of interest saving 20 hours of study materials research monthly
- Communicate and visualize fundamental programming and math concepts with a 100% student satisfaction rate
- Guided students through various STEM courses with a 100% retention rate and 100% Honor Roll achievement

FIRST YEAR INNOVATION & RESEARCH EXPERIENCE

Design Engineering Research Intern

College Park, MD

May 2023 – Jul 2023

- Optimize unmanned underwater remote robotics increasing underwater propulsion by 50% using Bayesian optimization
- Built and tested 9 designs based off parameters selected using Latin hypercube sampling and test driven development
- Presented final product and documentation to 100+ students and 10 distinguished professors at a research conference

PERSONAL PROJECTS

BLUEBULL! WEB-BASED GAME

Mar 2023

- Coded 5+ object-oriented features of the application using fundamental programming principles and debugging
- Animated game environment using recursive calls and developed frame rate control to improve performance by 20%
- Implemented game collision physics using polymorphic class used by 100% of sprites and obstacles in-game

BEATSCAPE AI-MUSIC PLAYER APP

Jan 2023

- Designed & structured frontend GUI in python using Tkinter library consisting of 4 pages of content & functionality
- Integrated OpenAI DALL-E Image generator using open API to integrate 10+ unique album covers into software
- Managed and planned group code reviews throughout software development life cycle on Trello saving 5hrs. weekly

ACTIVITIES

COLLEGE SUCCESS SCHOLARS

Team Leader & Chair of Professional Development Committee

College Park, MD

Aug 2022 – Present

- Present and engage audience at student events aimed at supporting 120+ student's academic and professional success
- Lead 5 committee members in planning and coordinating 5+ student events using monthly agendas and deadlines

AMAZONNEXT SCHOLAR

Organization Member

College Park, MD

Jun 2023 – Present

- Collaborated with 3 developers to solve 20+ data structures and algorithm problems using the UMPIRE algorithm development framework principles and several programming languages
- Received \$5,000 scholarship for exemplary commitment throughout the program

ADDITIONAL

Languages & Technologies: Java, Python, HTML, CSS, JavaScript, MATLAB, Git, Agile, Autodesk Inventor, SCRUM

Certifications: Lyft Back-End SWE Virtual Experience Program | CodePath Advanced Technical Interview Prep Course

Awards: OMSE Academic Excellence Award (2023) | National School Orchestra Award (2022)