

# Salia Nahshal

[snn2126@barnard.edu](mailto:snn2126@barnard.edu) | Brooklyn, NY | [portfolio](#)

## EDUCATION

**Barnard College, Columbia University** | New York, NY | *B.A. Computer Science, Minor Education* Expected May 2025

Deans' List (Fall 2021, Spring 2022, Spring 2023)

GPA 3.8

**Certificates:** Opportunity College Junior Web Development fellowship (2023), Inspirit AI Innovators Fellowship(2023), React.js certification(2023)

**Programming Coursework:** Advanced Programming in C, Data Structures and Algorithms, Intro to Databases, Fundamentals of Computer Systems, UI Design, Discrete Math, Linear Algebra, Multivar. Calculus, Game Design

**Technical Skills:** Java, Python, C, Javascript, HTML/CSS, React.js, SQL, Figma

## EMPLOYMENT

**Girls Who Code | Summer Immersion Program** | New York, NY | *Teaching Assistant* May. 2024 - present

- Lead an advisory group, providing mentorship on technical and personal growth.
- Assist in delivering game development and design curriculum using P5.js.
- Facilitate workshops and coding sessions in a supportive environment.
- Provide hands-on support during student hours for programming concepts and debugging.
- Maintain accurate records of student attendance, participation, and progress.

**Peer-to-Peer Tutoring** | New York, NY | *Tutor* Sep. 2022 - present

- Facilitated weekly sessions with three students to assist them with their coursework.
- Provided tutoring in introductory Java programming and Arabic language studies.

**Access Barnard Mentoring Program** | New York, NY | *Mentor* Sep. 2023 - present

- Conduct weekly meetings with three mentees to support their college transition.
- Support peer mentoring, recognized as a high-impact practice for student success.
- Assist mentees in identifying their needs and connecting them to relevant institutional resources.

**Columbia Build Lab Tumo Start-Up** | New York, NY | *Product Designer* Sep. 2023 - Nov. 2023

- Guided MVP through product evolution, overseeing design, problem-solving, and usability tests.
- Collaborated with the startup founder, project managers (PMs), and engineers to align design with the product vision.
- Maintained visual identity in Figma, ensuring brand consistency with logo, images, and theme colors.
- Designed marketing posters for promotional campaigns, contributing to the overall marketing strategy.

**Columbia University Emerging Scholars Program** | New York, NY | *Teaching Assistant* Sep. 2023 - Nov. 2023

- Supported a 16-student peer-led workshop introducing talented individuals to computer science.
- Facilitated engaging classroom discussions and encouraged active participation/.
- Delivered lectures on specialized topics, such as Computer Vision, to enhance students' understanding.

## SOFTWARE PROJECTS

**SipCityStories (Full-Stack Web App)** Mar. 2024

- Developed responsive web application using Javascript, Flask, and Bootstrap to help tourists and locals search for, view, and add coffee shops in New York City that are suitable for authentic cultural exploration.

- Implemented search functionality using Jinja that enables users to search for cafes by name, or amenities, displaying the number of matching search results and highlighting matching substrings.
- Created an “Edit Cafe” functionality using AJAX for data exchange that fetches existing data for a specific cafe and renders the edit form template with pre-populated fields.
- Created web page prototypes in Figma, applying usability heuristics and design principles for optimal UI.
- Ensured compliance with web accessibility standards by providing descriptive alt text for all media.
- Utilized: Python, Flask, Jinja, Javascript, AJAX, HTML, CSS, Bootstrap, Figma

### **Mystic Forest Quest (Game Development)**

Mar. 2024

- Contributed to the development of a forest-themed adventure game, focusing on immersive exploration and captivating aesthetics.
- Collaborated with team members to establish the game's design aesthetic and mechanics, prioritizing elements such as top-down perspective and maze-like tilemap layout.
- Implemented player movement, enemy AI, gem collection mechanics, and scene transitions, ensuring functionality and enjoyment.
- Demonstrated adaptability by adjusting design decisions and priorities based on project needs and feedback.
- Utilized external resources to source assets and sounds, ensuring cohesive visual and auditory experiences.

### **HTTP Server Implementation**

Dec. 2023

- Developed web server from scratch, implementing HTTP 1.0 and handling GET requests for static records from a prepopulated database, and returning dynamic content to HTML frontend while maintaining persistent TCP connection with backend server.
- Gained an understanding of C programming, memory management, and networking concepts, including sockets, and HTTP protocols.
- Leveraged small-scale, modular programming and UNIX principles of small, interconnected programs for manageable and effective software design and development.
- Utilized: C, UNIX basics, TCP/IP, sockets programming, HTTP, Git (Terminal), Vim, Valgrind

## **LEADERSHIP AND EXTRACURRICULARS**

**Columbia Women in Computer Science (WiCS)** | New York, NY | *DivHacks Publicity Lead*

Feb. 2023 - Present

- Lead outreach efforts to engage schools and clubs within and outside Columbia University.
- Collaborate with the tech director to establish event design aesthetics.
- Manage social media outreach on platforms like Twitter, Instagram, Facebook, and LinkedIn.
- Create engaging content to promote event excitement.
- Coordinate selection and purchase of event swag, including T-shirt design and stickers.

**Columbia DivHacks** | New York, NY | *Web Developer*

June 2023 - Sep 2023

- Collaborated in diverse teams, promoting creativity, precision, and advanced computing for project success
- Utilized Figma for visually cohesive website sections, ensuring an appealing and user-friendly design
- Engineered captivating thematic designs, integrating Bootstrap, HTML, JS, and CSS to enhance user experiences
- Ensured website responsiveness across diverse devices through rigorous testing and optimization
- Enhanced usability by aligning content with WCAG standards for accessibility

## **RESEARCH**

**Extern** | *Mobalytics Remote Extern*

May 2024 - June 2024

- Conducted comprehensive analysis of various gaming genres, focusing on game mechanics, key performance indicators (KPIs), revenue models, and player psychology.
- Gained firsthand experience by engaging with specific games, providing in-depth insights within selected genres.
- Delivered a compelling presentation summarizing research findings and offering strategic recommendations for market expansion.
- Aligned research with Mobalytics' vision and mission, collaborating effectively with team members to support market goals.