

# SHEHRYAR HANIF

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## EDUCATION

### NYU ABU DHABI

May 2023 | Abu Dhabi, UAE

B.S. in Computer Science, B.S. in Mathematics

Current CGPA: 4.00/4.00

## KEY COURSEWORK

- Algorithms
- Data Structures
- Special Topics: Applied Internet Technology (Full-Stack Web Development)
- Computer Systems Organization
- Linear and Nonlinear Optimization
- Linear Algebra
- Probability and Statistics
- Multivariable Calculus

## SKILLS

### PROGRAMMING

- Python (Including Pandas , NumPy , Regex , Beautiful Soup )
- HTML , CSS (Including Bootstrap 4 ) , JavaScript (Including jQuery , Express.js , Node.js , Passport.js )
- C++ \C
- MongoDB (Including MongoDB Atlas )
- R
- Julia
- Unity
- C#

### LANGUAGES

Native or Bilingual Proficiency:

- English
- Urdu

Full Working Proficiency:

- Hindi
- Punjabi

### MISCELLANEOUS

- LaTeX
- Microsoft Word, Excel, PowerPoint

## AWARDS/HONORS

- Top in World, Cambridge O Level Sociology
- Top 10 Mathematicians in Pakistan, National Mathematics Talent Contest
- Third Place in Punjab, Best Across Four Cambridge A Levels

## PROJECT WORK

### ALIENATION GAME | UNITY, C#

Jan. 2021 | github.com/ShehryarHanif/alienation

- Designed atmosphere and wrote story for point-and-click adventure for weekend-long game development contest "NYU Global Game Jam 2021"
- Implemented story progression mechanism, collision detection, automated movement, and responsive environmental assets through C# scripts

### PERSONAL PORTFOLIO WEBSITE | HTML, CSS, JAVASCRIPT

Jan. 2021 | github.com/ShehryarHanif/ShehryarHanif.github.io

- Developed an updatable portfolio website to showcase my personal profile
- Utilized Bootstrap , Font Awesome , and other dynamic toolkits

### BRICK BLAST GAME | PYTHON, PROCESSING

Oct. 2019 - Dec. 2019 | github.com/ShehryarHanif/brickBlast

- Programmed a desktop derivative of mobile game "Brick Blast Ball"
- Constructed original randomized algorithms to provide infinite gameplay through procedurally generated levels
- Built innovative cannonball collision mechanic based on the Physics model of light

## PROFESSIONAL EXPERIENCE

### UNDERGRADUATE RESEARCH ASSISTANT | NYU ABU DHABI

Sep. 2020 – Present | Abu Dhabi, UAE

- Lead coding and data science efforts for research team working with Assistant Professor Andy Harris (Political Science)
- Specialize in data processing frameworks for Python (particularly pandas , numpy , and beautifulsoup4 ) and R (particularly dplyr , ggplot2 , and shiny )
- Fuzzy-matched and geo-mapped election polling stations in Malawi, so as to identify voting irregularities and incidence of electoral fraud
- Web-scraped, cleaned, and analyzed databases for Pakistani election polling stations to see how turnout varies between gender-segregated and combined stations

### LIBRARY AND IT COMMITTEE MEMBER | NYUAD STUDENT

#### GOVERNMENT

Jan. 2021 - Present | Abu Dhabi, UAE

- Liaise between Library Staff, IT Support Team, and student body of 1,600 students, addressing needs and concerns with regards to techical support during the pandemic
- Revised WiFi support forms, set up posters for technological guidance, and implemented measures to increase library usage in a socially distant manner
- Coordinate planned overhaul of Student Portal (center-point of college communications)

### SOFTWARE ENGINEER | THE GAZELLE (STUDENT NEWSPAPER)

Sep. 2020 - Feb. 2021 | Abu Dhabi, UAE

- Maintained the full stack for the website (www.thegazelle.org) for UAE's biggest college newspaper
- Updated front-end interface with JavaScript and TypeScript
- Revised website's documentation for server set-up and usage, so as to ease team transitions in future years