

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)
- JavaScript (Including jQuery , Express.js , Node.js , Passport.js)
- HTML , CSS (Including Bootstrap 4)
- 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

PROFESSIONAL EXPERIENCE

UNDERGRADUATE RESEARCH ASSISTANT | NYU ABU DHABI

Sep. 2020 – Present | Abu Dhabi, UAE

- Led coding and data science efforts for research team working with Assistant Professor Andy Harris (Political Science)
- Specialized 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 in order to identify voting irregularities and incidence of electoral fraud
- Web-scraped, cleaned, and analyzed databases for Pakistani polling stations to see how turnout varies between gender-segregated and combined stations

LIBRARY AND IT COMMITTEE MEMBER | NYUAD STUDENT

GOVERNMENT

Jan. 2021 - May 2021 | Abu Dhabi, UAE

- Liaise between Library Staff, IT Support Team, and student body of 1,600 students, addressing needs and concerns with regards to technical 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
- Coordinated planned overhaul of Student Portal (center-point of all college communications and administrative documents)

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 with the purpose of easing team transitions in future years

PROJECTS

HANDLEBARS GYM TRACKER | HTML, CSS, JAVASCRIPT, MONGODB

Apr. 2021 | github.com/ShehryarHanif/handleBars

- Developed front-end and back-end of web application with support for exercise-tracking and personalized exercises searches
- Implemented asynchronous JavaScript with **Fetch.js** , user authentication with **Passport.js** , and online hosting with **Heroku** and **MongoDB Atlas**

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

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 and mirrored reflections