SHEHRYAR HANIF

shehryar.hanif@nyu.edu | +971 501 450 552 / +92 302 8464816 | www.shehryarhanif.com

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 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
- 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