MALIK MUHAMMAD SHEHRYAR HANIF

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EDUCATION

NYU ABU DHABI
May 2023 | Abu Dhabi, UAE
B.S. in Computer Science, Mathematics
Current CGPA: 4.00/4.00

KEY COURSEWORK

• Algorithms
• Data Structures
• Special Topics: Applied Internet Technology
• Linear and Nonlinear Optimization
• Computer Systems Organization
• Linear Algebra
• Probability and Statistics

SKILLS

PROGRAMMING
Skilled In:
• Python (Including Pandas, NumPy, RegEx, Beautiful Soup)
• C++/C
• HTML, CSS (Including Boostrap 4), JavaScript (Including jQuery, Express.js, Node.js, Passport.js)
Exposure To:
• R
• Julia
• MongoDB (Including MongoLab)
• Unity
• C#

LANGUAGES
Native or Bilingual Proficiency:
• English
• Urdu
Full Working Proficiency:
• Hindi
• Punjabi

MISCELLANEOUS
• LaTeX

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

PAST AND CURRENT EXPERIENCE

NYU ABU DHABI | Undergraduate Research Assistant
Sep. 2020 – Present | Abu Dhabi, UAE
- Coding and data science lead for research team working with Assistant Professor Andy Harris (Political Science)
- Currently using R and Python (particularly pandas and numpy) scripts to fuzzy-match and geo-map election polling stations in Malawi, so as to identify voting irregularities and incidence of electoral fraud
- Earlier used Python (particularly beautifulsoup4) to web-scrape, clean, and analyze databases for Pakistani election polling stations to see how turnout varies between gender-segregated and combined stations

NYUAD STUDENT GOVERNMENT | Library and IT Committee Member
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
- Currently planning overhaul of Student Portal (center-point of college communications)

THE GAZELLE | Web Team Member
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
- Worked with DigitalOcean Droplet, which was used to set up website server

PROJECT WORK

PERSONAL PORTFOLIO WEBSITE | HTML, CSS, JavaScript
Jan. 2021 - Present | github.com/ShehryarHanif/ShehryarHanif.github.io
- Design and implement an up-to-date portfolio website to showcase my personal profile
- Utilize Bootstrap, Font Awesome, and other dynamic toolkits

ALIENATION GAME | Unity, C#
Jan. 2021 | github.com/ShehryarHanif/alienation
- Designed atmosphere and wrote the 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 environmental assets through C# scripts

BRICK BLAST GAME | Python, Processing
Oct. 2019 - Dec. 2019 | github.com/ShehryarHanif/brickBlast
- Designed and developed a desktop derivative of the popular mobile game "Brick Blast Ball"
- Designed original randomized algorithms to provide infinite gameplay through procedurally generated levels
- Built innovative cannonball collision mechanic based on the Physics model of light