

Varun Srinivasarao Budati

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EDUCATION

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| Virginia Tech , Blacksburg, Virginia | Aug 2023 – Present |
| Bachelor of Science in Computer Science + Minor in Mathematics & Finance | |
| IES Bhavans , Jleeb Al-Shuyoukh, Kuwait | Jan 2010 – May 2023 |
| Senior School Certificate Examination in Computer Science | GPA: 91.2/100 |
| Secondary School Examination in Information Technology | GPA: 94.3/100 |

WORK EXPERIENCE

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| Research Assistant , REACH Lab - Virginia Tech, Blacksburg, Virginia | March 2024 – Present |
| <ul style="list-style-type: none">Conducted an extensive literature review under the leadership of Dr. Ihudiya Finda Williams, on a focused project on Rural Computer Science Education.Synthesized over 30+ articles and papers across libraries in computing, education in reparation of \$500,000 National Science Foundation grant.Trained 6 research assistants on different methods of searching through databases and provided tools and methodologies for prompt queries. | |
| Web Developer, Intern , The Amricani Cultural Centre, Kuwait City, Kuwait | June 2021 – September 2021 |
| <ul style="list-style-type: none">Designed and created 5 interactive web-pages for young museum visitors, featuring sequential exhibit zones with QR codes for historical information about Kuwait.Developed 8 puzzles and games using cardboard pieces and silhouettes.Designed 3 interactive tools like query boards/trivia questions to enhance children's learning of Kuwait and Al-Sabah exhibit history. | |

PROJECT WORK

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| Momentum Trading Strategy Development | May 2024 - August 2024 |
| <ul style="list-style-type: none">Developed a momentum trading strategy using Python, fetching historical stock data and implementing technical indicators (MACD, RSI) to generate buy and sell signalsBacktested the strategy on historical data, utilizing Pandas for data manipulation and Matplotlib for visualization.Performance comparison between strategy returns and buy-and-hold returns Candlestick charting with overlaid technical indicators and trade signals Portfolio value tracking based on simulated trades | |
| Options Pricing Calculator & Graph Using the Black-Scholes Model | June 2024 – July 2024 |
| <ul style="list-style-type: none">Real-time calculation of option prices and Greeks for stock price, strike price, maturity, risk-free rate, and volatilityImplemented an implied volatility estimator using the Newton-Raphson method.Enhanced data analysis efficiency by 30% through utilizing Pandas for structured data display and Matplotlib for visualizing implied volatility against strike prices, leading to more informed decision-making. | |

CORE SKILLS

Programming languages: Python, SQL, Java, C/C++, JavaScript, HTML/CSS, and Matlab.

Languages: English, Hindi, Telugu, Sanskrit.

AWARDS

Declared Winner of Brick Math Olympiad, Kuwait

Awarded Distinction in the National Math Olympiad, Kuwait