# Varun Srinivasarao Budati

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#### **EDUCATION**

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

Research Assistant, REACH Lab - Virginia Tech, Blacksburg, Virginia

March 2024 - Present

- 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

- 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

## Options Pricing Calculator & Graph Using the Black-Scholes Model

June 2024 - July 2024

- Calculated call and put option prices along with Greek metrics to assess option price sensitivity.
- Implemented 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.

**Messaging App** 

June 2022 – September 2022

• Led and developed a program using Python and SQL that provides results for addition, deletion, and searching a message for input from the user.

## **Cyber Security Project**

May 2022

• Delivered presentations and talks on the importance of cybersecurity in daily life to schools across the Middle East and India as part of a top 18 group in a regional competition.

#### **CORE SKILLS**

Programming languages: Python, Java, SQL, and Matlab.

Languages: English, Hindi, Telugu, Sanskrit.

## **AWARDS**

Declared Winner of Brick Math Olympiad, Kuwait

Awarded Distinction in National Math Olympiad, Kuwait