Abijith Manikandan

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Education

Kean University Union, New Jersey

B.S. in Computer Science, Minor in Cybersecurity and Mathematics *Expected Graduation: May 2025*

- **GPA:** 3.9
- **Dean's List:** 2022, 2023, 2024
- **Scholarships:** NSF (S-STEM), CMD-IT/ACM Richard Tapia, CAHSI Research Experiences for Undergraduates, Garden State Louis Stokes Alliance for Minority Participation, Upsilon Pi Epsilon Honor Society, AI4ALL Discover AI
- **Research Conferences:** 35th Annual GMiS, 36th Annual GMiS, CMD-IT/ACM Richard Tapia
- **Extracurriculars:** ACM Executive Board, Women in Cybersecurity, Girls Who Code, ALPFA

Experience

Research and Development Intern Jun 2024 – Aug 2024

Virginia Tech *Blacksburg, Virginia*

- Developed an avatar library in C# and Unity, enabling developers to view and integrate customizable avatars into their projects efficiently.
- Led heuristic evaluations for emerging technologies, conducted testing, and prepared detailed reports on usability and accessibility.
- Co-authored a research paper on advancements in privacy, accessibility, and security in social AR/VR.

Supplemental Instruction Team Leader Jan 2023 – Present

Kean University *Union, New Jersey*

- Managed computer science teaching assistants and developed engaging learning experiences for computer science students.

Code Samurai Tutor Jan 2023 – Present

Kean University *Union, New Jersey*

- Tutored students one-on-one in: C#, Computer Organization & Architecture, Cybersecurity, Cryptography, Data Structures, Java, JavaScript, Linux, Python, and Web Development.

Projects

Enhancing Pedestrian Safety with eHMIs | *C#, Python, Unity*

- Developed a C# and Unity simulation of electronic human-machine interfaces (eHMIs) for fully autonomous vehicles to assess user comfort in crossing a one-lane road with randomized vehicle behavior.
- Conducted road safety analysis using Python to derive actionable insights on the effectiveness of different eHMIs.
- Presented at the 2023 GMiS conference in Pasadena, California to automotive industry leaders.
- Received distinction through the CAHSI Research Experiences for Undergraduates Scholarship.

JACS Car Rental | *SQL, Visual Paradigm*

- Designed user workflows for the JACS Car Rental System using Visual Paradigm to create various diagrams, including use case, communication, and state machine diagrams. Developed entity-relationship diagrams (ERDs) and wrote SQL queries to enhance database management and ensure effective data handling.

Althea | *HTML, JavaScript, CSS*

- Developed a choice-based RPG game using HTML, Javascript, CSS and published it for users to access.

Personal Website | *HTML, JavaScript, CSS, Bootstrap*

- Developed a personal portfolio website using HTML for structure, CSS for styling, and PHP for dynamic content management.

Technical Skills

Languages: Java, Javascript, HTML/CSS, C#, Python, SQL, Kotlin, Swift, TypeScript, R, Dart
Technologies: Java Spring, React.js, Angular, Vue.js, PyTorch, Bootstrap, Node.js
Concepts: Object Oriented Programming, Data Structures & Algorithms, Discrete Structures, Database, Web Development, Cryptography, Cryptanalysis, Artificial Intelligence, Restful APIs