Maya Pandya

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EDUCATION

Northwestern University   **Sept 2020 - Dec 2024**
MS, Computer Science | BS, Biomedical Engineering   *Evanston, IL*
- **GPA: 3.8**
- **Relevant Coursework:** Data Structures and Algorithms | Computer Systems | Machine Learning | Data Privacy | Cryptography | Human-Computer Interaction

WORK EXPERIENCE

Northwestern University   **May – Aug 2023**
Biomedical Software Research Intern   *Evanston, IL*
- Developed and optimized reinforcement learning algorithms in Python, increasing decision-making simulation accuracy by 8% in dynamic environments.
- Examined the impact of environment visibility on decision-making accuracy, conducted experiments, and refined models to enhance neural simulation effectiveness.
- Presented model findings to interdisciplinary teams to guide design decisions.

Center for Innovation in Global Health Technologies   **Aug – Sept 2023**
Biomedical Engineer - Product Development   *Evanston, IL*
- Led a team of three in engineering a passive blood separator for the DASH platform, enhancing the rapid PCR testing process for infectious diseases including HIV and Hepatitis B, while coordinating tasks and timelines to achieve project milestones.
- Transformed the product design through iterative prototyping and validation experiments, resulting in a 20% increase in blood separation efficiency compared to the initial prototype.
- Compiled and documented progress and findings in formal research reports, ensuring clear communication of methodologies and outcomes to stakeholders and contributing to future project enhancements.

PROJECTS

Open Street Map Navigation System   **Mar 2023**
- Developed a C++ backend to process and analyze large Open Street Map datasets, including nodes and footways, using Dijkstra's algorithm for refined route planning on the Northwestern University campus.

UV Monitoring Wearable for Melanoma Survivors   **Aug 2024**
- Engineered a wearable device with real-time UV tracking and algorithms for personalized sun protection, integrating a mobile app to display UV levels, exposure history, and tailored recommendations for melanoma survivors.
- Proactively collaborated with a cross-functional team to iterate on the design, spearheading improvements based on user feedback.

Adversarial Game AI Development   **Oct 2023**
- Designed and implemented intelligent agents using Minimax and Alpha-Beta Pruning to optimize gameplay strategies in the Konane game, with interactive and automated testing modes for performance evaluation.

TECHNICAL SKILLS

- **Programming:** Python | C/C++ | HTML/CSS/JavaScript | SQL | MATLAB
- **Systems and Technologies:** Node.js | Tensorflow | Scikit-learn | Keras | OpenCV | Git | Pytest