Tilak Patel

315-720-8202 | tilakny@gmail.com | LinkedIn | GitHub | tilakpatell.com | US Citizen

EDUCATION

Northeastern University — April 2027
Bachelor of Science — Boston, MA

- **Major**: Computer Science (AI Concentration)
- **Minors:** Computer Engineering & Robotics
- **Relevant Coursework:** Object-Oriented Design, Graduate Computer Systems, Algorithms & Data, Engineering LLM-Integrated Systems, User Experience Design, Fundamnetals of Computer Science II & I, Data Research Practicum

TECHNICAL SKILLS

- **Languages:** Python, Java, JavaScript, SQL
- **Web/Frameworks:** React, Flask, FastAPI, Material UI, Axios, Tailwind CSS, Pygame, Conda
- **Data/ML:** PyTorch, NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn, Generative AI, LLMs, ChatGPT
- **Tools/Other:** AWS, Git, Linux, Bash, Jupyter Notebook, Gradle, JUnit, PyTest, Postman, Eclipse, Shell Scripting, GitHub, Azure, VSCode, Unix, Windows, Google Colab

EXPERIENCE

Generative AI Intern — July 2024 – Present
Empowerreg AI — Seattle, WA

- Engineered production ready visualizations for the **Risk Annotation Matrix Product**, enhancing data interpretation
- Integrated and parsed **Generative AI** model data with **Pandas**, **Seaborn**, and **React.js**
- Created a Risk Assesment Matrix graph with **Material UI** to facilitate real-time data analysis for clients
- Processed **thousands** of lines of JSON medical device data and utilized Python's **FastAPI** to efficiently transmit it

Undergraduate Research Assistant — Jan. 2024 – Present
Mon(IoT)r Lab, Northeastern University — Boston, MA

- Automated data collection for privacy research with **Python** scripts
- Improved data gathering efficiency via **RESTful API** integration
- Increased processing speed with **multithreading** for requests
- Led voice assistant experiments (Google Assistant, Amazon Alexa), focusing on privacy and user interaction analysis

Software Engineer Intern — June 2024 – July 2024
GreenTree Capital and Asset Management — Boston, MA

- Implemented **Auth0** , enhancing security and user access
- Optimized **React.js** applications for user engagement, contributing as a volunteer
- Ensured robust APIs with **Postman** documentation and testing
- Collaborated with various interns to troubleshoot and build **authentication** for a React website

PROJECTS

Co-OpSearcher Web App — Jan. 2024 – Present
Python, Flask, React, Vite, Selenium, ChatGPT API, Tailwind CSS, Framer Motion

- Architecting full-stack app to automate internship search with **Flask API** and **React.js** frontend
- Implemented React with Vite and Tailwind CSS, boosting load times and engagement
- Integrated Selenium for web scraping and ChatGPT API for intelligent job matching
- Enhanced UX with Framer Motion animations, improving interface interactivity

Personal Portfolio — July 2024
React, Vite, Framer Motion, Tailwind CSS, Git

- Developed responsive portfolio using React and Vite for optimal performance
- Implemented Framer Motion animations to create dynamic and engaging movement.
- Utilized Git for version control with branching and CI practices
- Designed modern UI with Tailwind CSS, enhancing visual appeal and UX

FloodIt Game — June 2024
Java, Northeastern Tester Library

- Engineered Java-based FloodIt game with efficient board-handling algorithms
- Applied OOP principles for modular, scalable code structure