Anthony Piacentini

| tonypiaz95@gmail.com |(978)-778-0511 | [LinkedIn]| GitHub: tp1az

EDUCATION

Union College, Schenectady, NY *Bachelor of Science in Computer Science with a Minor in Data Analytics* June 2025
Relevant Coursework: Software Engineering, Algorithms and Data Types, Algorithm Design, Networks and Data Communications, Programming Languages, Computer Organization, Large Scale Software Design, Calculus I and II, Data analytics, Discrete Mathematics, Macro Economics, Econometrics

ACADEMIC EXPERIENCE

Kidney Pairwise Matching, **Guided Research***,* Union College Name of Department   Fall 2024
- Developed a bipartite graph-based system to optimize patient-donor matching using the Hopcroft-Karp algorithm, considering both blood type and HLA compatibility.
- Integrated text-based input for streamlined testing and scalability, enabling easy customization for diverse datasets.
- Demonstrated how graph algorithms can improve organ transplantation processes, providing a foundation for addressing other resource allocation challenges in healthcare.

Code Review Website, **Software Engineering,** Union College Name of Department   Spring 2024
- Worked in a team to build a website to facilitate reviews of beginner code, enabling feedback and skill development in a collaborative environment.
- Leveraged Node.js for backend functionality, TailwindCSS for responsive and user-friendly UI design, and Supabase for real-time database management and authentication.
- Designed to bridge the gap for new developers by providing a supportive platform for constructive feedback and coding best practices.

Boggle Game, **Large Scale Software Design,** Union College Name of Department   Winter 2024
- Developed a collaborative Boggle game where players find words in a randomized grid, focusing on multiplayer functionality and gameplay dynamics.
- Used Git for version control to manage contributions, resolve conflicts, and maintain a clean codebase during team development.
- Enhanced team members' experience in game design, Git workflows, and collaborative software development practices.

Election Prediction Tool, **Intro to Data Analytics**, Union College Name of Department   Winter 2023
- Developed predictive models for voter outcomes using machine learning algorithms to gain insights from historical election data by scraping, cleaning, and structuring data with Pandas
- Utilized SciKit-Learn to build and optimize classification models, training on subsets of election data to identify key predictors of voting patterns and enhance model accuracy in forecasting future election results
- The algorithm was then used to show what in a county would need to change for them to be predicted to vote for other candidates. Some example metrics for change was average age, average income, and the gender ratio

EMPLOYMENT EXPERIENCE

Tool Rental Associate, **Home Depot,** Danvers, MA   June-23 - Sept. 2023   June 24 - Sept 24
- Use of computer applications to assist in customer satisfaction
- Basic maintenance of tools
- Customer interactions to best interpret their needs

Sales Associate, **Lowe's Home Improvement,** Danvers, MA   June 21 - Sept. 21   June 22 - Sept. 22
- Answered phones to help customers and resolve basic concerns.
- Answered customer questions and provided store information.
- Identified support issues and initiated appropriate action to resolve problems.

SKILLS & QUALIFICATIONS

- **Programming Languages:**Python (5 years), Java (6 years), HTML(3 years), JavaScript(2 years), MySQL(1 year)
- **Frameworks:** Angular, TailwindCSS, NextJS, pyTorch, sciKitLearn, Pandas
- **Technical Skills:** Regression Analysis, Data Analysis, Git collaboration