# Andrew Dickman

### **EDUCATION**

### **New Jersey Institute of Technology**

Newark, New Jersey, December 2024

Bachelor of Science in Computer Science

GPA: 3.65/4.0

Dean's List - Fall 2020 - Present

Relevant Coursework: Operating Systems, Adv. Databases, Software Engineering, Data Science, Machine Learning, Adv. Web Dev, Adv. Data Structures & Algorithms, Intensive Linux Programming, Computer Systems, Calc I - III, Differential Equations

Languages: C/C++, Python, SQL, HTML/CSS, JavaScript/TypeScript, Bash, Java, PHP

**Skills**: MySQL/MongoDB, React, Express, Node, Flask, Axios, Git, sk-learn, Google Cloud, ML, VertexAI, GPT, Gemini, LLMs, NLP, RAG Method, Prompt Engineering, BigQuery, DocumentAI, Debugging, Linux, Leadership, Problem Solving

#### **EXPERIENCE**

Johnson & Johnson May 2024 - August 2024

Global Safety Data Science Intern

Raritan, NJ

- Mastered foundations of data science, including preprocessing, dimensionality reduction, EDA, utilizing supervised and unsupervised models, hyperparameter tuning, validation testing, and pipeline construction, then presented these learnings in depth to a team of professional data scientists
- Contributed to a GenAl pipeline using Python to automate the parsing, extraction, and summarization of relevant data for PVA drafting from Global JnJ Agreements with GCPs Gemini LLM, estimated to save significant costs and metrics
- Developed a multithreaded GenAl tool using GPT 4o, Gemini 1.5, and a MLP Neural Network to determine PVA necessity
- Developed and deployed an interal PV Chatbot with memory, which takes in one or more PDF documents, and using either a Gemini 1.5 or GPT 40 LLM, will answer any user query by referencing each of the uploaded documents
- Led the creation of an organizational event to benefit the community which was aligned with the J&J Credo, and helped organize multiple other credo and networking events as part of the J&J TICC

# **New Jersey Institute of Technology**

September 2023 - Present

Teaching Assistant – CS288 (Intensive Linux Programming), IT202 & IT302 (Adv. Web Dev)

Newark, NJ

- Guided students in mastering core full stack web development using HTML, CSS, PHP, JavaScript/jQuery, and MySQL, as well as modern full stack practices with the MERN stack – MongoDB, Express.js, React.js, Node.js
- Helped students to understand specific topics covered within the course, including: Linux, bash scripting, utilizing advanced C topics to write large programs, such as state space search algorithms, and parallel programming
- Responsible for grading students homework assignments, as well as reviewing and understanding their submitted code
- Wrote a Bash Script to automatically run and test student submissions, cutting time spent grading down by roughly 60%

# Shoprite

July 2018 - Present

West Milford, NJ

Front End Manager, Customer Service, Bookkeeping

- Oversees and is in charge of managing the front end and all the employees within it
- Manages all cash within the store and comes up with efficient solutions quickly to overcome any problems that occur
- · Works directly with managers and customers to work out any issues that arise in such a way that satisfies both parties

### **PROJECTS**

# **Covey.Town Chess Game** | Course Project

- Implemented a functional Chess Game into a pre-existing multiplayer game codebase developed in TypeScript + React
- Developed a RESTful API backend using Express to provide chess functionality, logic, and to keep track of the game state, also including a Stockfish API in Python using Flask to allow for AI opponent and dynamic board state analysis
- Used Git/Github as a VCS and it's CI to work concurrently with team members while monitoring Pull Requests, doing frequent Code Reviews on new features, and preventing any regression

### **Biblical AI** | Personal Project

- Built a full-stack website with React, featuring an interactive Bible interface, paired with a GPT-4o-powered chatbot
- Utilized a Bible API for scriptural text display and applied CSS for an appealing, responsive, and interactive experience
- Integrated a custom Biblical AI Chatbot for both verse and chapter-specific interpretations, offering standard insights and interactions with other verses, as well as interpretations from a specific user-selected religion through a prompt

# NYghtcrawler App | Capstone Project

- Worked with a team of fellow students to develop a New York bar-crawling mobile app using Dart, Flutter, and Android Studio, earning third place in the NJIT Capstone competition and recognition as team MVP by the Project Manager
- Implemented a customizable, self-optimizing polyline which provides the shortest route between any amount of bars
- Established a history-based crawl feature, which includes historical sites throughout the crawl and provides fun facts about them as they're approached