PEYTON CHANG

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Work Authorization: U.S. Citizen (no sponsorship required)

EDUCATION

University of Maryland, College of Computer, Mathematical, and Natural Sciences   Grad Date: May 2025
B.S. in Computer Science   College Park, MD
Relevant Courses: Algorithms, Discrete Structures, Computer Systems, Database Design, Data Science, Web Development, Artificial Intelligence, Data Visualization, Computer Vision, Computer Systems Architecture

PROFESSIONAL EXPERIENCE

Blue Sage Solutions   May 2024 - August 2024
Software Engineer Intern   Englewood Cliffs, NJ
- Contributed to the development of a business rules generator that simplified the process of creating complex business logic, allowing non-technical clients to define rule criteria independently.
  - Developed automation tools in Google Sheets using Apps Script to streamline internal processes and reduce manual effort.
- Engineered and maintained an end-to-end digital loan platform in an agile development environment.
- Resolved IT maintenance tickets and collaborated on projects to improve platform analytics and interface performance using Jira.
- Queried and managed relational databases using SQL to support data analysis and reporting needs.

SharpHat Inc.   June 2022 - August 2023
Quality Assurance Analyst Intern   Englewood Cliffs, NJ
- Conducted comprehensive testing of a data tracking system for NFL football games used by clients, including sportsbooks and analytics platforms.
- Identified, documented, and tracked bugs, ensuring system reliability and data accuracy for real-time event reporting.
- Collaborated closely with developers to reproduce issues, verify fixes, and improve system robustness through iterative feedback.

PROJECTS

Recipe Recommender Web App   November 2024 - December 2024
- Built and deployed a web application that recommends recipes based on user-provided ingredients.
- Integrated the Spoonacular API to fetch and filter recipes that match the ingredients entered into a dynamic search bar.
- Implemented user functionality to save favorite recipes, which are persisted in a MongoDB database.

Lambda Calculus Interpreter and Compiler   February 2023 - March 2023
- Implemented a lexer and parser for evaluating lambda calculus expressions using OCaml.
- Developed an interpreter to execute expressions and a compiler to translate English-like commands into valid lambda calculus syntax.

Regular Expression Processing Engine   October 2022 - November 2022
- Designed and implemented algorithms to convert regular expressions into nondeterministic finite automata (NFA).
- Built a string-matching engine capable of verifying whether input strings conform to NFA-defined patterns.
- Implemented in Python

TECHNICAL SKILLS

LANGUAGES: Java, Python, C, C++, Ocaml, SQL, Rust, Javascript, HTML
TECHNOLOGIES/FRAMEWORKS: PostgreSQL, MySQL, MongoDB, Docker, D3, ReactJS, Express.js, Postman