Pranav Varshney

Pranav Varshney | Github | Email | US Citizen | (636) 675 0940

Education

University of Michigan — Ann Arbor, MI
Bachelors of Science in Computer Science & Statistics — *May. 2026*

CS Courses: Web Systems, Databases, Architecture, Theory, Data Structures, Algorithms, Linux, Python
Stats Courses: Probability Theory, Computational Statistics, Data Analysis, Linear Algebra, Calculus I-III,
Extra-curriculars: Michigan Hackers, Michigan Research and Discovery Scholars, Michigan Poker Club

Technical Experience

igniteXL Ventures — Remote
Incoming igniteXL Extern — *Jun. 2024 - Current*
- Incoming AI-Powered VC Deal Sourcing Extern

United Wholesale Mortgage — Pontiac, MI
Software Engineer Intern — *May. 2024 - Current*
- Piloting a relation **datamart** between Jira, Bitbucket & Deploys in **C#** & **SQL** to prevent data duplication in company databases, will analyze relation between code base changes & production issues in **Python** simulations
- Repurposing **Python** underwriter scorecard algorithm with risk & underwriting teams to predict loan defects, preventing avoidable errors in loan documentation & saving projected **$500,000** annually in loan defects; testing
- Migrating databases to Google Cloud Platforming services; simultaneously writing **Python** & **SQL** scripts to monitor business access to GCP, flagging inefficiency or overuse of GCP resulting in lost revenue with finance team

The Michigan Daily — Ann Arbor, MI
Web Developer — *Oct. 2023 – Apr. 2024*
- Lead error handling & debugging processes, fixing **75+** website errors to make user experience more enjoyable
- Cut down website vulnerabilities by **40%** with team, maintaining site's integrity through user authentication
- Increased website efficiency by **44%** reducing redirects & http requests, raising engagement length by **10%**

Ratna Global Technologies — Newark, CA
Software Engineer Intern — *Jun. 2023 – Sept. 2023*
- Spearheaded construction of a **Node** & **React** website used to control a vehicle rental service with 50+ locations
- Built a custom chatbot using open source **OpenAI** that automates customer service requests based on client data

The Big-DIG Research Lab — Ann Arbor, MI
Undergraduate Researcher Assistant — *Apr. 2023 – Jun. 2023*
- Engineered a custom **Python** sorting system for school ranks & locations from **750+** schools automatically, eliminating manual labour & guiding lab to conclude data analysis & visualization **2 months** ahead of schedule
- Demonstrated a **99.5%** statistical significance test through supplemental simulations & visual aids in **Python**

London Business School — Remote
Undergraduate Researcher Assistant — *Jan. 2023 – Apr. 2023*
- Leveraged natural language processing using the **NLTK** library in **Python** to extract & input data from **2500+** contracts into a self launched **SQL** database, optimizing data entry, extraction, & accessing by **25%** for lab use
- Determined **90%** significant difference in structure of internal & external contracts through **Tableau** & **R** analysis

Project Experience

C++ Standard Library: Leveraged **C++20** features to implement & optimize data structures & algorithms in standard library, enhancing code efficiency & maintainability while staying up-to-date with language advancements.

SQL Imitation: Mimicked simple SQL functionality in **C++17**, customizing C++ functionality via shell scripting. Harnessed improved SQL functionality to restructure previous research projects, boosting runtime efficiency by **15%**

Programming Skills

Languages: C/C++, C#, Python, Java, R/RStudio, HTML/CSS, Javascript, SQL, LaTeX, Assembly

Technologies: Linux, Git, nano, nvim, MacOS, Windows, Visual Studio, VScode, Xcode, Zed, JIRA, Docker, Tableau

Libraries and Tools: CMake, Numpy, Pandas, Matplotlib, Jupyter Notebook, NLTK, JSON, Pytorch