Manjot Singh

Manjos2@uci.edu | manjotsingh18.github.io | github.com/ManjotSingh18 | linkedin.com/in/manjot-singh18

Education

University of California, Irvine   *Sep. 2021- June 2025*

B.S in Computer Science | GPA: 3.33 | Regents' Scholar | Class of 2025

Relevant Coursework: Data Structures, Algorithms, Python, C++, Java, Information Retrieval, Software Design, Discrete Mathematics, Software Libraries, Linear Algebra, Statistics, Architecture, Software Engineering, Search Engines

Projects

Grosearch | Full-stack, Python, Selenium, Flask, HTML, CSS, JS, Postman, OOP   *Sep. 2022 - Nov. 2022*
- Developed a **grocery search engine** capable of displaying **350,000+ products** from several grocers for side-by-side comparison on a single site, improving search times by **60%** compared to retailer sites
- Utilized **Selenium** to dynamically **scrape** multiple grocers that offered no public API access, creating a custom process of **data retrieval** and storage
- Designed **UI** leveraging **Jinja2** to visualize dynamic tables displaying products sorted by **lowest price** facilitating **software design** that prioritizes budgeting for users

CarTelligence | Full-stack, Python, Pytorch, Django, HTML, CSS, Railway   *June 2023 - Aug. 2023*
- Deployed an application that utilizes **machine learning** capable of classifying **196 classes** of vehicles by make, model, and year.
- Utilized **transfer learning** training **ResNet-50** and **VGG-16** models on **16,185 images** enabling seamless classifications with an average **accuracy** of **73%**
- Created custom Django forms to implement image **compression** reducing deployment server memory usage by **50%** and improving classification by **700 ms**

Medisee | Full-stack, Python, Tkinter, FDA API   *June 2023 - July 2023*
- Developed a **medicinal search engine** that visualizes over **5,000 cases** of adverse effects per queried medication from the FDA API improving **accessibility** to information
- Created a GUI implementing features such as **pagination**, filtering, and index retrieval

Walmartify | Back-end, Python, XLSXwriter, Postman, Geocoding, TomTom API   *June 2022 - July 2022*
- Developed a product price analyzer that locates Walmarts within **50 miles** of users and dumps **300+** products per query into formatted **spreadsheets** seamlessly.
- Utilized **Postman** to tailor API headers that adhere to Walmart policies allowing **1000+** polite requests from users
- Gained interest had design discussions with **clients** as Walmart no longer supports searching local stores

ZotMe | User Interface Design, UCI Mental Health Hackathon   *May 2022*
- Worked as a member of a **5-person team** to design and pitch ZotMe, a college-orientated social media app that promotes group activities and removes toxic features to mitigate loneliness and mental health issues.
- Helped generate iOS/Android interface mock-ups, engaging in **software requirements** and design collaborations with **Agile** and **Scrum** methodologies.
- Pitched ZotMe to an audience of over **200 students** alongside judges and was awarded **$1000** in funding.

Technical Skills

Languages: Python, C++/ C, Java, HTML, CSS, Javascript

Frameworks: Flask, Django, Jinja2

Tools: Git, Postman, MemTest86, CrystalDiskMark, VMware

Libraries: Selenium, Pytorch (ResNet-50, VGG-16), XlsxWriter, BeautifulSoup, Matplotlib, NumPy

Concepts: Object-Oriented Programming, Test-Driven Development, Agile/Scrum Methodologies, Version Control, Deployment

Awards/Certifications

CyberPatriot Platinum Tier Finisher   *May 2021*
CompTIA Security+ Certification   *April 2021*