Kunwarjeet Sodhi

832-689-2172 | kunwarssodhi@gmail.com

EDUCATION

University of Houston

Houston, TX

Bachelor of Science in Computer Science

Aug 2020 - May 2025

Experience

Software Engineer - Founder

May 2016 - Current

Dominus Labs LLC

Houston, TX

- Established and led a SaaS company catering to both B2B and B2C sectors. Successfully managed a team of 2 developers for over 3 years, fostering a productive and collaborative work environment.
- Delivered services to over 5 international businesses. Generated over \$500,000 in real revenue over 2022.
- Utilized a typical tech stack of NestJS microservices and PostgreSQL for backend development. Ensured robust and efficient deployment on Hetzner or GKE AutoPilot.
- Developed Machine Learning APIs using YOLOV4/YOLOV8 and Detectron2 models. Deployed APIs with Torchserve or Triton Inference Server on GKE Autopilot.
- Achieved scalability of backend APIs to handle over 1000 requests per second at peak times.

Backend Engineer

July 2023 - January 2024

Pure

Berkeley, CA

- Developed mission critical scraping algorithms from the ground up to access and process data from over 13 different rare coin and metal provider websites and auction houses.
- Continuously refined algorithms to accommodate updates in target websites, ensuring uninterrupted data access and maintaining a high success rate in data extraction.
- Bypassed multiple anti-bot/anti-scraping systems to consistently scrape data at scale.
- Developed a scaleable backend with Python and Golang, capable of handling hundreds of thousands of products with high reliability. Employed Supabase and Docker for efficient data management and deployment.

PROJECTS

reSolved | NestJS, NodeJS, Puppeteer, Python, Flask, PostgreSQL, Docker, PubSub

June 2020 – July 2023

- Reverse engineered and developed scaleable solvers/bypasses for a variety of CAPTCHA types (Google reCaptcha, GeeTest, hCaptcha, Arkose Labs FunCaptcha).
- Utilized novel computer vision techniques to build highly accurate, yet flexible image extraction and analysis algorithms
- Developed and deployed a flexible and scaleable browser automation solution in the cloud using Puppeteer and Docker. Utilized Prometheus and Grafana to provide highly observable metrics.
- Built a highly available user dashboard and developer API, coupled with E2E testing and Jenkins CI/CD.

domALERT | Python, Flask, HTML/CSS, JavaScript, RabbitMQ

June 2019 – July 2020

- Created a multi-functioning alert system for price and in-stock notifications for low availability consumer goods, connected to 3rd party messaging platforms, such as Slack and Discord.
- Scraped over 50 Shopify sites, Nike, Adidas and several others to aggregate product availability and pricing.
- Built an event-driven system using PostgreSQL and RabbitMQ to store and queue alerts via WebSockets as well as send SMS and Email messages via 3rd party APIs. Dockerized and deployed on GCP. System handled over 2500 events per second at peak usage.
- Designed and developed a dashboard system from scratch using vanilla HTML/CSS and JavaScript. Used by 12 international companies and over 6000 global users. Generated over \$30,000 in revenue in 6 months.

Technical Skills

Languages: Python, NodeJS/TypeScript, GoLang, Java, C++

Frameworks: NestJS, Flask, Express, Triton Inference Server, GCP PubSub, RabbmitMQ, Beautiful Soup

Developer Tools: Git, Docker, JenkinsCI/CD, Google Cloud Platform, AWS, PostgreSQL, MySQL