

Hamza Ehsan

hamza-ehsan@outlook.com
hamzaehsan.com
github.com/hamzaehsan97
linkedin.com/hamza-ehsan
(920)636-9355
Chicago, IL

WORK EXPERIENCE

NINJATRADER GROUP | Full-Stack Engineer

Dec 2021 - Present | Chicago, IL

- Led the redesign of the onboarding platform in React using Redux, Recoil, and Material UI.
- Spearheaded fraud-detection script which helped in preemptively voiding futures contracts without sufficient funds on a large-scale enterprise-grade trading platform.
- Migrated critical reporting metrics from deprecated service to our platform with no downtime, reclaiming 2TB storage and massively decreasing operational load.
- Integrated mission-critical APIs during the acquisition of the Tradovate trading platform which helped migrate 100,000 trading customers to the NinjaTrader's new platform.

WEIDERT GROUP | Software Engineer

Aug 2020 - Dec 2021 | Chicago, IL

- Created a custom CSS minifier tool that reduces app bundle sizes by 20%. Built using Python and flask on average increasing first-load times by 8%.
- Designed and developed a new backend analytics dashboard in React to handle critical forecasting metadata and monitor API interactions and uptime.
- Worked across the entire stack including API, administrator tools, and relational databases.

TITLETOWN TECH - MICROSOFT | Software Engineer Intern

June 2019 - Sep 2019 | Green Bay, WI

- Developed a machine-learning algorithm in python to classify potentially successful start-ups, streamlining potential investment opportunities from 20,000 to 350.
- Owned and operated a CTC Speech Recognition module for a VR language learning software using Python, Tensorflow, and W&B.

LAWRENCE UNIVERSITY | Software Engineer Intern

June 2018 - June 2019 | Appleton, WI

- Implemented third-party services and external APIs to student-facing portals reducing code duplicity by 35% using JavaScript, Redux, and Zeplin.
- Conducted a large-scale upgrade of the university's web portal from Drupal-7 to Drupal-8 including custom module development for seamless integration.

SELECTED PROJECTS

DroneSeek | Autonomous Facial Recognition Drone

- Created flight software for an autonomous facial recognition drone that relies on computer vision to navigate indoors using a Tello drone, OpenCV, Pandas, Pygame, and Flask.

Texties | SMS note-taking solution

- Engineered a full-stack SMS-based note-taking app using Twilio, Flask, Next.js, Netlify, and Heroku. Integrated a custom-built multi-factor authentication to reduce overhead.

EDUCATION

Lawrence University

Bachelors of Computer Science
Aug 2016 - Aug 2020 | Appleton, WI

SKILLS

Languages

JavaScript • Python • Dart
SQL

Frameworks

React • Git • Flutter • PostgreSQL
Flask • NodeJs • Electron

Tools

Visual Studio Code • AWS
Google Cloud Services • Docker
Kafka

AWARDS

MakeHarvard- Winner

Harvard University (2019)

DifferenceMaker - Runner up

U. of Massachusetts (2019)

The Pitch - Winner

UW - Green Bay (2019)

LuLaunch - Winner

Lawrence University (2018)

MadHacks - Runner up

UW - Madison (2018)

COURSEWORK

Computer Science

Systems programming • Data
Structures • Algorithm Analysis
Theory of Computation •
Computer Graphics

Data Science

Machine Learning • Neural
Networks • Data Visualization
Data Scientific Programming