Hamza Ehsan

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WORK EXPERIENCE

NINJATRADER | Full-Stack Engineer
Feb 2022 - Present | Chicago, IL

- Led the redesign of the onboarding platform in React using Redux, Recoil, and Material UI.
- Spearheaded fraud-detection script which helped preemptively void 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 NinjaTrader's new platform.

WEIDERT GROUP| Software Engineer
Aug 2020 - Feb 2022 | Chicago, IL

- Created a custom CSS minified 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