# Karsen Hansen

Passionate graduate of *Gonzaga University* with a Bachelors in Computer Science and a Minor in Economics. My inherent interest in software and web development has ignited a meaningful desire to accelerate my growth with like-minded people. I'm a devoted, life-long student of programming and development with a love for learning that knows no bounds.

"I'm not getting smarter every day, just less stupid."

## **Experience:**

1. **Vroom** - Co-Founder - 2012 - 2013

In 2012, online automotive giant Vroom.com began as AutoAmerica out of a single physical store in Grand Prairie, Texas. It was there I helped the initial team of 12 develop out the (basic) web presence (front-end) including primitive layouts, vehicle listings, financing tools, and digital media using html, css, and JS. This was prior to my full-stack development knowledge and even professional education - Wholly underqualified, I had the passion and connections to get the opportunity; an experience which solidified my desire for professional development. (See references - Kevin Westfall)

2. **BOEING** - Co-Op Project - 2020 - 2021

The *BOEING-360* project uses a custom built 360 camera integrated into a custom full-stack web application to connect airplane passengers flying 30,000 ft. above the earth with all the wonders below them. We're providing passengers with a meaningful way to engage with these points of interest (POI) in real time by viewing and interacting with POIs as you're passing over, ultimately, providing an experience unlike any other and sparking new travel interests.

Myself and a team of three other extremely bright and motivated individuals worked in an Agile (SCRUM) environment to build a full-stack web application with an integrated 360-degree camera stream, live map feed (independent of network accessibility), and a dynamically populating list of interactive POIs (points of interest) based on current position and a dynamic radius .

The custom camera module was built from NVIDIA's Jetson Nano (4GB) microcomputer and is capable of capturing & live streaming in 360x220 degree, 4K HDR video over a secure local area network in a custom navigable view port. (See references - Donald B. Lee).

## **Education:**

Nova South Eastern University - 2012-2014

- Studied business administration.

Florida International University - 2014-2015

- Transitioned from Business Administration

Awakening.

North Idaho College - 2016 - 2018

Associates of Science3.8 GPA / Dean's List

Gonzaga University - 2018 - 2021

- Computer Science Bachelors' | Econ Minor

- 3.8 GPA / Dean's List

## **Projects:**

Most of my projects are on GitHub/karsen

- 1. Full-Stack Web apps
  - a. Boeing-360 Co-Op Development
  - b. User Authentication &Dashboard (comprehensive)template (RESTful)
  - c. User Authentication (RESTful)
  - d. To-Do
  - e. To-Do 2.0
  - f. Hotel Booking
  - g. Chat App
  - h. Secret (user authentication)
- 2. React.js
  - a. My personal website on GitHub Pages
  - b. Sorting visualizer
  - c. Keeper (To-Do)

## 3. iOS Apps

- a. AR Memory card game
- b. BMI Calculator
- c. Climate app
- d. Dice app
- e. Magic 8 ball
- f. Egg Timer
- g. Quizzler
- h. Tip Calculator/Splitter
- i. Text adventure game

## 4. HTML/CSS/JS

- a. AutoAmerica.com
- Random, unnoteworthy projects I worked on prior to my knowledge of version control/GitHub

## **Primary Strengths:**

# Communication, teamwork, and leadership.

## Languages:

- 1. Python (& OOP languages)
- 2. Swift
- 3. Java
- 4. JavaScript
- 5. TypeScript
- 6. HTML
- 7. CSS/SASS (BEM)
- 8. C++

(I love learning new languages/things)

## Frameworks & Libraries:

- 1. React.js
- 2. EJS / Bootstrap
- 3. Mongoose
- 4. Axios
- 5. Node.js / Express.js
  - a. Node Package Manager(NPM)
  - b. Creating RESTful APIs
  - c. Web Security / Secret Management / JWTs (User Auth)

#### Cloud services:

- 1. Heroku
- 2. AWS
- 3. MongoDB / Atlas (Local & Remote Databasing)
- 4. Firebase

## Version / Environment Control:

- 1. Git/GitHub
- 2. Docker

# OS' / CLI's

1. Linux (Debian & Ubuntu) - ZSH/Bash

2. Windows 10 - DOS

3. OS X - Bash

# Workflows / Methodologies

- 1. AGILE (Scrum)
- 2. Jira
- 3. Kanban/Trello

## **References & Referrers:**

# 1. Kevin Westfall - westfallk@gmail.com

Founder @ Vroom Founder @ BMW Financial Services CEO @ Prime Auto Group VP @ AutoNation

# 2. Donald B. Lee - donald.b.lee@boeing.com

Senior Engineer @ BOEING, Seattle, WA

# 3. Maggy Pons - maggypo@baptisthealth.net

VP Business Ops @ Baptist Hospital, Miami, FL

# 4. Scott Broder - scott7827@gmail.com

Founder @ Xpollin (private incubator)
Professor of Computer Science (Research & Design) @ Gonzaga University