LIAM BOWERS

I am a passionate, self-motivated and curious engineer with several years experience working as a highly valued partner and mentor to my teammates, designing and implementing technically sophisticated web and mobile applications using JavaScript, Python, C++ and more. I am gaining experience with AI, computer vision and machine learning as they apply to autonomous robotics, both in my studies at Georgia Tech and in Udacity's Self-Driving Car Engineer Nanodegree.

GitHub (https://github.com/liamondrop) | LinkedIn (https://linkedin.com/in/liamondrop)

EDUCATION

Georgia Institute of Technology (Aug 2015 - Present)

Master of Science in Computer Science: Computational Perception & Robotics

Cleveland Institute of Art (1998—2002)

Bachelor of Fine Arts: Glass Sculpture

EXPERIENCE

Self-Driving Car Engineer: Udacity (Mar 2017 - Present)

- Implemented Extended and Unscented Kalman Filters in C++ to fuse Lidar and Radar measurements.
- Built a vehicle detection pipeline that finds and tracks cars in a video stream, using Histogram of Oriented Gradients (HOG), and Support Vector Machines.
- Modeled NVIDIA's end to end learning solution using Keras to teach a convolutional neural net to steer a car using recorded images of human driving and corresponding steering angles as inputs.
- Built a traffic sign classifier using Tensorflow capable of classifying traffic signs with an accuracy of over 98%.

Senior Software Engineer: Lifion by ADP (Mar 2016 - Present)

- Designed and implemented a metadata-driven platform for application development using Node.js, React, Redux, Jest, etc.
- Developed cross-platform React Native bridges for native iOS/Android
- Led a team of 10 geographically distributed application developers across 3 continents
- Helped foster a culture of testing and code review

Senior Software Engineer: Insight Catastrophe Group (Feb 2014 - Mar 2016)

- Built modular, multi-layered single page web applications to manage the underwriting and servicing of insurance policies and quotes
- Interfaced heavily with a wide array of internal microservices, translating XML & JSON data into robust, performant user interfaces

Web Developer: Artspace Marketplace (Jan 2013 - Feb 2014)

- Refactored legacy JavaScript to modular Backbone applications for searching and filtering artworks and collections
- Implemented graceful degradation strategies for legacy browsers
- Improved site performance across the stack
- Redesigned static asset build and deployment pipeline

Web Developer: SeatGeek (Sep 2010 – Dec 2012)

- Worked on large scale Backbone applications, handling the client-side development of SG's interactive seating charts, and events calendar
- Managed the development and implementation of 100s of seating charts for sports and concert venues across North America
- Wrote procedure to automatically subdivide 1000s of seating chart sections into labeled rows drastically reducing the time to production
- Created interactive stadium "heat maps" to visualize NFL & MLB sales data

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ACTIVITIES

DIY Robocars NYC: Organizer (Jun 2017 – Present)

- Leading a group of autonomous vehicle hackers who make and race autonomous RC cars on a budget (https://www.meetup.com/DIY-Robocars-NYC/)

Self-Driving Cars and Autonomous Vehicles Group: Organizer (Apr 2017 – Present)

- Building a community of engineers, researchers, and entrepreneurs focused on the rapidly growing field of self-driving cars in New York and the surrounding region (https://www.meetup.com/The-Self-driving-Cars-Autonomous-Vehicles-Group/)