**Graduate Researcher**

A graduate researcher is responsible for conducting professional research on data science and deep learning, including conducting literature reviews, formalizing methodologies, collecting/analyzing data, and writing a manuscript.

Specifically, I developed techniques to address / improve the assurance and robustness of DNNs to ensure their correctness in the face of adverse perturbations or uncertainties (human-induced, environmental, etc.).

I applied technologies from a number of disciplines (e.g., reinforcement learning, evolutionary computing, game theory, etc.) to assess and improve the robustness of DNNs.

**Graduate Assistant**

Teaching assistants assist with any number of tasks in order to support a professor’s class activities. They include creating assignments, projects, exams, and other activities designed to transform course concepts into practical applications. As a lead TA for several courses, this role also includes training other teaching assistants or undergraduate assistants and managing the course closely with the professors.

**VW**

This capstone project involved designing and developing a demo application on the Android and iOS platform which introduces potential customers to VW’s connected interactive phone car services and familiarized existing customers with new system features.

**GeoNexus**

This summer internship involves designing and developing a prototype application to extend GeoNexus’ geographic information system to visualize work order services on a map for handheld devices for customers with 2 other interns. We used a number of technologies including Android Studio (Java, XML), pair programming, unit testing, threads, Git, and SQL.