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## ***OBJECTIVE***

Developing predictive and autonomous solutions using machine learning modeling and statistical analysis.

## ***EDUCATION***

### **Purdue University, West Lafayette, IN**

Bachelor of Science in Computer Science (Honors) and in Applied Statistics. *August 2014 - May 2017*  
Graduating in 3 years. Current GPA: 3.95

### **Amador Valley High School, Pleasanton, CA**

*August 2010 - June 2014*

***TECHNICAL SKILLS:*** Proficient in C/C++, Java, Python, R, Linux/UNIX systems. Experience with Objective-C, and Javascript.

## ***ACTIVITIES AND LEADERSHIP***

### **Neural Network Prediction for Real Time Bidding: NSF REU Fellow**

*July 2015 – present*

- Worked on an online advertisement dataset that included multiple features describing a user and indicating if the user clicked a certain advertisement.
- Tested various machine learning and deep learning techniques to achieve high prediction scores using a hybrid neural network and factorization machine model.
- Utilized an external GPU setup to run certain models 80 times faster.
- Publishing results to Journal of Purdue Undergraduate Research.

### **Purdue Aerial Robotics IEEE: Software Co-Lead**

*August 2014 – present*

- Building a plane that flies autonomously to follow waypoints, performs search patterns, and carries a small artificial payload to drop.
- Developed a communication protocol to send telemetry data and receive objectives from a remote server.

### **ACE Coding: Lead Teacher, Curricula Developer**

*August 2013 – present*

- Taught middle school students “scratch”, which is a visual programming tool, Java, and C++.
- Developing new curricula to expand lessons to other programming languages and skills.

### **iOS Application Developer**

*March 2013 – August 2015*

- Created a mathematics application called “My Pocket Solver”, which is an equation solver and can determine common statistical values given a data set.

### **Amador Valley High School Robotics Club (AVBotz): Software Lead** *August 2010 – July 2014*

- Developed an autonomous submarine that could navigate through and manipulate obstacles in an underwater course at RoboSub. Received 6<sup>th</sup> place out of 30 college teams at Robosub 2013.