

# Ian Sebastian Rios-Sialer

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## EDUCATION

**University of Michigan, Ann Arbor**

**September 2013 – April 2017**

Bachelor of Science in Engineering (B.S.E), Mechanical Engineering

GPA: 3.5 / 4.0

## EXPERIENCE

**Consultant - Student Intern**

**January 2017 – Present**

### **Civil Maps**

- Used Artificial Intelligence to convert sensor data into map and location information for Autonomous vehicle applications
- Performed testing at Mcity in different weather conditions to form dataset with multi-sensor (LiDAR + camera) data
- Collaborated with TechLab to assess business strategy of Civil Maps and optimize project management

**Multidisciplinary Design Project Intern**

**January 2016 – December 2016**

### **General Motors**

- Designed, produced and deployed an end-to-end, scalable and integrated solution for testing, and empirical modeling
- Optimized Design of Experiments (DOE) for Subcomponent Testing, Resource Allocation, and Operations
- Created algorithms and methods for Feature Selection, Model Selection, Bad Data Treatment, Test Matrix Reduction that were automated in software
- Conducted Project Management, Stakeholder Management, Contingency Planning, Risk assessment, Scope definition, and Strategic Planning

**Assistant in Research**

**April 2016 – December 2016**

**Ford New Generation Vehicle – U of M – Autonomous Vehicle Project**

- Trained Deep Neural Networks on Simulation and real world data (KITTI, Imagenet, etc)
- Studied implementations of Deep Reinforcement Learning Networks for Motion Planning and Control
- Implemented Computer Vision Architectures (ResNet, AlexNet, R-CNN) and Libraries (Caffe, Torch, Theano, Mxnet, Tensorflow)

**Undergraduate Researcher**

**April 2016 – December 2016**

**Aerospace Engineering Department – University of Michigan College of Engineering**

- Designed Enemy-Detection Algorithm for Distributed Multiple Agent Feedback Control Systems
- Implemented and tested Gaussian Mixture Model Regression, and LSTM-RNN for trajectory prediction in MATLAB and PYTHON

**Energy Consultant**

**February 2015 - December 2016**

**Industrial Assessment Center - (US Department of Energy)**

- Provided comprehensive energy, productivity, and waste assessments to small and medium sized US manufacturers
- Wrote technical reports of recommendations from the assessment that led to reduced energy costs in companies and saving of over \$ 20k+ annually

## SKILLS

- PYTHON      • MATLAB & SIMULINK    • C++    • AWS / AZURE    • TENSORFLOW+KERAS / MXNET / TORCH
- MICROSOFT OFFICE    • ASANA + SLACK    • LATEX    • PRODUCT DEVELOPMENT + CUSTOMER RESEARCH
- PRODUCT MANAGEMENT    • PROJECT MANAGEMENT    • BUSINESS STRATEGY