Michaela **Buchanan**

DATA SCIENTIST

892 SE Locust St, Dundee OR 97115

☐ (971)701-8702 | ✉ buchanam@oregonstate.edu | 🏠 https://michaelabuchanan.github.io | ⬛ michaelabuchanan | in michaelabuchanan

Education

Oregon State University   *Corvallis, OR*
B.S. IN COMPUTER SCIENCE   *Sept. 2016 - May 2020*
- GPA: 3.40

Skills

Programming	Python, C/C++, JS, Tensorflow, Pytorch, LaTeX
Computing	Linux system administration, cloud computing, ROS
Web	Node.JS, Express, Bootstrap, HTML5, CSS, SQL, PHP
Languages	English, German

Experience

Mark III Systems   *Dundee, OR*
DATA SCIENTIST   *July 2020 - present*
- Assisting customers with beginning AI based projects and using AI related tools
- Creating ML/DL education series aimed at beginners in the field
- Working on NLP related problems in the health care field

Center for Genomic Research and Biocomputing   *Corvallis, OR*
LEAD DL UNDERGRADUATE RESEARCHER   *June 2017 - May 2020*
- Provided support in both hardware and systems management of a scientific computing cluster
- Managed individual projects to improve cluster usability for users
- Completed command-line based pipeline which allowed a research group to classify plankton images using a neural network on a cloud computing service
- Maintained the CGRB's Tech Data AI Demo website which races multiple machine hardware configurations on several Deep Learning models

Extracurricular Activity

Senior Capstone Project for the City of Portland   *Corvallis, OR*
TEAM MEMBER   *Sept. 2019 - present*
- Worked as part of a team to develop a pedestrian detection and tracking algorithm
- Developed object detection and tracking pipeline with a focus on optimization for deployment on the edge
- Used Tensorflow and TensorRT as tools to address this task

Motorsports   *Dundee, OR*
TRACK, DRIFT, AUTOCROSS   *May 2019 - present*
- Personally performed a complete rebuild on a 4G63 engine for high-performance applications - building the car to be an endurance racecar
- Tracking and maintaining a '18 Camaro SS 1LE and Yamaha R3
- Maintaining and drifting a '99 Camaro SS

Honors & Publications

2021	**A cost-effective maize ear phenotyping platform enables rapid categorization and quantification of kernels**, The Plant Journal - `http://dx.doi.org/10.1111/tpj.15166`
2019	**Lowering the ML/DL Activation Energy for Heterogeneous Computing**, IBM Developer Portal Blog Post - `https://developer.ibm.com/linuxonpower/2019/08/29/lowering-the-ml-dl-activation-energy-for-heterogeneous-computing/`
2018	**Undergraduate Poster Contest: First Place**, CGRB Fall Conference *Corvallis, OR*