## Justin McCarley, GIT

justinmccarley@gmail.com	(503) 327-4478	www.linkedin.com/in/jcmccarley
	Geologist and GIS Tech	
ArcGIS Proficiency 3D Data Creation and Analysis Technical Document Writing	Environmental Science GIS Field Data Collection Geologic Field Methods	Licensed Drone Pilot Python/HTML/Javascript Geologic Natural Hazards
	Relevant Work Experience	

## **Oregon Department of Geology and Mineral Industries**

Natural Resource Specialist 1 – Natural Hazards Section

03/2017 - 09/2018

My work at DOGAMI involved close collaboration with a team of geologists on various projects dealing with slope stability and landslide hazards across the state of Oregon. My primary project, in conjunction with the BLM, involved mapping historic and prehistoric landslide features from lidar data and historical imagery using ArcGIS. This was done using the DOGAMI special paper 42 methodology. During my time there, I identified and mapped over 4200 individual landslides. Additional projects included: researching zoning and land use/development ordinances for communities prone to landslide hazards to help them develop regulations that better integrate DOGAMI's statewide landslide inventory and susceptibility maps, doing site research on prehistoric landslide dammed valleys to better constrain Cascadia co-seismic landslide activity, and mapping landslides within the recent Chetco-Bar fire burn area for future slope stability planning. My work typically required regular collaboration with technical and non-technical collaborators from a variety of outside agencies. Additionally, I also assisted fellow DOGAMI geologists in a wide range of projects as needed from day to day.

### Port of Portland

Contractor – Technician, GIS and Environmental Operations Intern – GIS and Environmental Operations 09/2016 - 07/201708/2015 - 09/2016

I started as an intern and was later hired on as a contractor at the Port. I gained a great deal of experience working with and editing enterprise scale GIS data sets, preparing maps and reports for internal and external use, collecting and verifying GPS data in the field, and performing analysis of geographic and scientific data. I worked extensively with environmental staff at the Port doing various hydrologic monitoring including; illicit outfall discharge monitoring, storm water compliance sampling and monitoring (including completing chain of custody paperwork), and assisting with annual storm water master plan calculations. My largest project and proudest accomplishment at the Port was heading a project using well logs and historic water rights records to build a water and monitoring well GIS database which was then integrated into a dynamic mapping application via Mapbox GL javascript for internal Port-wide consumption. This project was key in facilitating the Port's efforts to centralize and update their environmental hydrology records.

# Education and Certifications

Portland State University - Master of Science, Geology

2018

Oregon State Board of Geologist Examiners – Registered Geologist in Training

2015

FAA – Part 107 Commercial Drone Pilot's License

2018

### Additional Skills and Software

CloudCompare, Bundler, CMVS, ENVI, COSICORR, CIAS, RStudio, Matlab, Adobe Suite, Microsoft Office Suite, Sketch-up, FME workbench. I am also familiar with the use of GPR equipment, total stations, TLS collection, SFM photogrammetry methods, geologic field techniques, and can fold origami out of a dollar bill on demand.

#### References

Bill Burns Natural Hazards Section Supervisor, DOGAMI

(971) 673-1538 – bill.burns@oregon.gov

Simeon Ogle IT Ops. Sen. Manager, Port of Portland

(503) 415-6404 – sim.ogle@portofportland.com

**Dr. Adam Booth** Assistant Professor, Dept. of Geology, PSU non-relevant work history and additional references available upon request

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