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## Informatics PhD student publishes 1st author paper in Open Geospatial Data, Software and Standards

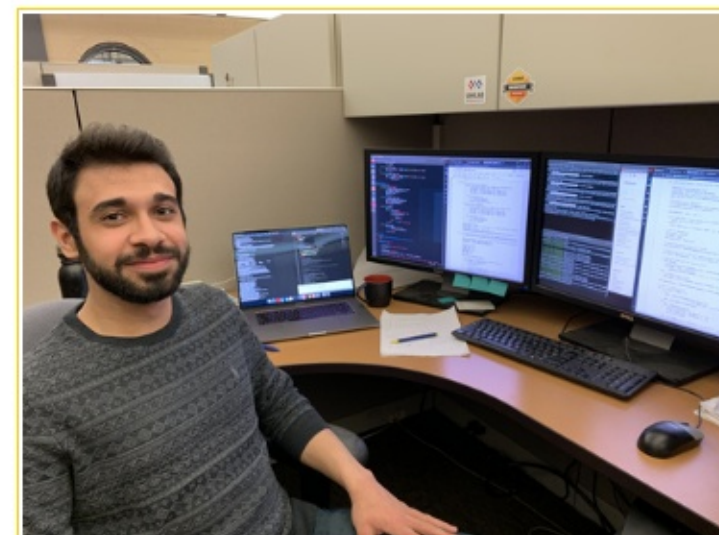
December 16, 2019

PhD student in informatics Muhammed Ali Sit has published a 1st author paper in the journal *Open Geospatial Data, Software and Standards*.

His project demonstrates how watershed delineation problem could be solved both on server-side and client-side using various web technologies and programming languages. It also presents a client-side general-purpose GPU algorithm to analyze high-resolution terrain data for watershed delineation by benefiting from the parallelizable nature of GPUs.

The full citation can be found below:

Sit, M., Sermet, Y., & Demir, I. (2019). Optimized watershed delineation library for server-side and client-side web applications. *Open Geospatial Data, Software and Standards*, 4(1), 8.



### Awards Given to the Project

**M. Sit contributed as a developer to the project.**

**Big Sioux River Flood Information System (BSRFIS) has been awarded**

The BSRFIS is a one-stop web platform to access real-time stream conditions, flood forecasts, visualizations, inundation maps and flood-related data and information for Big Sioux River.

The South Dakota Emergency Management Association (SDEMA) presented the Preparedness, Technology and Innovation Award to the South Dakota Department of the Environment and Natural Resource for the Big Sioux River Flood Information System (BSRFIS).

[https://www.capjournal.com/news/award-given-to-state-denr-employees/article\\_5db35dec-db38-11e9-88af-23a8a2cf04ae.html](https://www.capjournal.com/news/award-given-to-state-denr-employees/article_5db35dec-db38-11e9-88af-23a8a2cf04ae.html)

### Media Coverage

**Iowa Well Forecasting System**

Iowa Well Forecasting System (IWfOS), is a web-based tool that enables homeowners and well drillers to forecast ground well depths using historic ground well data as well as letting them access to water quality tests collected by Iowa Department of Natural Resources.

IWfOS project was covered on Daily Iowan, Iowa Public Radio and Iowa Environmental Focus.

Database highlights contaminants in private wells on **Daily Iowan**

<https://dailyiowan.com/2019/07/16/database-highlights-contaminants-in-private-wells/>

Where Are Iowa's Private Wells? New Online Map Shares Location, Water Quality Data on **Iowa Public Radio**

<https://www.iowapublicradio.org/post/where-are-iowas-private-wells-new-online-map-shares-location-water-quality-data#stream/0>

University of Iowa unveils new water well map on **Iowa Environmental Focus**

<https://iowaenvironmentalfocus.org/2019/06/25/university-of-iowa-unveils-new-water-well-map/>

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