

# Travis Adrian Dantzer

[dantzert@umich.edu](mailto:dantzert@umich.edu)

## **EDUCATION**

**PhD**, Civil Engineering – Intelligent Systems Engineering

University of Michigan, Ann Arbor MI, Expected 2025

**MSE**, Environmental Engineering – Ecohydrology

University of Michigan, Ann Arbor MI, May 2021

**BSE Summa Cum Laude**, Environmental Engineering

University of Michigan, Ann Arbor MI, May 2020

## **WORK HISTORY**

### **Teaching Experience**

*Graduate Student Instructor, UM College of Engineering, Jan 2021 – April 2021*

ENGR 100: A River Runs Through It. Microbenthic capture and categorization. Assist student project teams in design and technical communication. Flow and transect measurement. Discuss basic fluid mechanics, ecology, sediment transport.

Prof. Aline Cotel | [acotel@umich.edu](mailto:acotel@umich.edu)

*Graduate Student Instructor, UM Civil and Environmental Engineering, Aug 2020 – Dec 2020*

CEE 428: Groundwater Hydrology. Adjustment of course content for remote instruction, curriculum development, laboratory instruction in software including ArcGIS, Hydro GeoAnalyst, and Visual MODFLOW. Course administration and office hours.

Prof. Avery Demond | [averyd@umich.edu](mailto:averyd@umich.edu)

*Instructional Aide, UM Civil and Environmental Engineering, Jan 2019 – Dec 2019*

CEE 325: Intro to Fluid Mechanics. Creating problem sets, leading discussion, and holding office hours.

Dr. Lissa MacVean | [lissajm@umich.edu](mailto:lissajm@umich.edu)

### **Research Experience**

*Graduate Researcher, Digital Water Lab at the University of Michigan, Apr 2021 – Present*

Supervision of site surveys and deployment of sensors across Southeast Michigan. Hardware, firmware, and cloud integration of sensors and actuators using C, PSOC Creator, Python, and other tools.

Prof. Branko Kerkez | [bkerkez@umich.edu](mailto:bkerkez@umich.edu)

*Research Assistant, Hydrowit Research Group at the University of Michigan, Feb 2020 – Jan 2021*

Development of predictive models in Python for groundwater levels in the Amazon rainforest.

Thermodynamic and behavioral modeling of arctic fox in the Yamal Peninsula of Siberia using R.

Prof. Valeriy Ivanov | [ivanov@umich.edu](mailto:ivanov@umich.edu)

*Research Assistant, Digital Water Lab at the University of Michigan, Nov 2017 – Dec 2018*

Sensor node construction and design. Programming for cellular and WiFi connectivity and data collection.

Deployment including material acquisition and design adjustments in international collaborations.

Prof. Branko Kerkez | [bkerkez@umich.edu](mailto:bkerkez@umich.edu)

### **Other Work Experience**

*Office of Applied Technology, Wade Trim, Detroit MI, May 2020 – July 2020*

Automation of calibration, visualizations, and optimization of stormwater models using IronPython, VBA, and Bash. Market research on SaaS optimization of infrastructure models, IaaS cloud computing / storage, and IoT distributed sensing / control systems.

Mark Pribak, PE | [mpribak@wadetrim.com](mailto:mpribak@wadetrim.com)

*Music Director, St Mary Student Parish, Ann Arbor MI, August 2019 – Present*

Planning liturgies, directing a choir, coordinating and recruiting volunteer musicians, and playing piano. English and Spanish liturgies.

Ryan Migliore, Music Coordinator | [rmigliore@smspnewman.org](mailto:rmigliore@smspnewman.org)

*Youth Worker, Challenge 2000, Wellington New Zealand, Summer 2019*

Accompanying youth recently released from juvenile hall in education and work programs, fitness, and cultural activities.

Kitty McKinley | [kittymckinley@challenge2000.org.nz](mailto:kittymckinley@challenge2000.org.nz)

*Construction Management Intern, Spence Brothers, Saginaw MI, Summer 2018*

Requests for Information (RFI) management, scheduling, safety inspections.

## **LEADERSHIP AND SERVICE**

*Chi Epsilon Civil Engineering Honor Society - Michigan Chapter Vice President*

*University of Michigan Rugby Football Club Fundraising Director*

*St Mary Student Parish Alternative Spring Break Site Leader (El Salvador)*

*Undergraduate Student Advisory Council (UM Civil and Environmental Engineering)*

*Senior Design Task Lead – Water and Wastewater Conveyance*

## **AWARDS AND FELLOWSHIPS**

*University of Michigan CEE Masters Fellowship for Academic Excellence (\$10,000)*

*Richard F. and Eleanor A. Towner Prize for Distinguished Academic Achievement (\$1,000)*

*University of Michigan College of Engineering McGormley Fellowship (\$77,000)*