ERIC JAGODINSKI

Researcher - Data Scientist - Systems Engineer

CONTACT

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CERTIFICATIONS

Google Data Analytics Specialization

2022

A professional certificate through Coursera to prepare, process, analyze, and present data for data-driven decision. (SQL, Tableau, R)

Offshore Engineering Graduate Certificate

2018

A graduate level certificate specialization. Courses: Advanced Hydrodynamics, Offshore Structures, Hydrodynamics of Ship Design

SKILLS

Python	4+ yrs
Linux/Bash	4+ yrs
Machine Learning	3+ yrs
Git	3+ yrs
Fortran	2+ yrs
MATLAB	4+ yrs
C++	1+ yrs
Teaching	5+ yrs

INTERESTS

- **Volunteering** Middle School Engineering Camp (2021-2022)
- Advanced and Mixed Gas **scuba diving certifications**

EDUCATION

Ph.D. in Ocean Engineering — **2017 - Dec. 2022***

FAU - SeaTech Research Center, Dania Beach, FL

Dissertation: Multi-Agent Reinforcement Learning Based Turbulent Flow Control

Autonomous Multi-Agent Control with ***Reinforcement Learning*** in turbulent fluids simulations using ***Convolutional Neural Networks*** and ***Long Short-Term Memory*** for drag reduction .

M.S. in Ocean Engineering — **2018**

FAU - SeaTech Research Center, Dania Beach, FL

Masters earned En Passant while completing courses for my Ph.D.

B.S. in Ocean Engineering — **2010 - 2016**

Florida Atlantic University- Boca Raton, FL

Capstone Project: Designed and built an ***autonomous surface vehicle*** capable of GPS navigation and station keeping in dynamic conditions (Electrical Team Lead).

PUBLICATIONS

Data-driven identification of dynamically important regions in turbulent flows using 3D Convolutional Neural Networks — **In Review**

Submitted to Journal of Fluid Mechanics

Autonomously identified critical regions in turbulent flow using ***3D CNN*** and a designed ***interpretation technique***.

WORK EXPERIENCE

Course Instructor — **Summer 2021**

Florida Atlantic University, Boca Raton, FL

Taught ***Fluid Mechanics*** to a class of 30 students in-person and remote. Developed hands-on project template.

Graduate Intern — **Summer 2018**

Naval Research Laboratory, Stennis Space Center, MS

Developed simulations using OpenFOAM CFD software for ***rogue wave and wind interaction*** using High-Performance Computing.

Engineering Technician — **05/2014 -04/2015**

Agilis Measurement Systems, Palm Beach Gardens, FL

Assembled ***computer monitoring*** and ***signal conditioning*** systems used on GE turbines for NextEra. ***Analyzed*** real-time turbine data for monthly reports.

CONFERENCES

- Poster: **Turbulent flow Identification using 3D Convolutional Neural Networks.** FAU Data-Driven Science and AI Conference (2022).
- Presentation: **Data-Driven blowing-suction control in a turbulent channel flow.** APS Division of Fluid Dynamics (2021)
- Presentation **Convolutional Neural Networks for Identifying Coherent Turbulent Structures.** APS Division of Fluid Dynamics (2019)