101 N. Beach Rd
Dania Beach, Florida 33004
www.jagodinski.com

ERIC JAGODINSKI

(704) 608-2871
ejagodin@fau.edu

EDUCATION

Florida Atlantic University   **2017 – Dec 2022***
SeaTech Research Center, Dania Beach, FL
- **Candidate for PhD in Ocean Engineering**
- **Dissertation:** "Multi-Agent Reinforcement Learning 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.

Florida Atlantic University   **2018**
SeaTech Research Center, Dania Beach, FL
- **M.S. in Ocean Engineering** Earned En Passant while completing courses for my PhD

Florida Atlantic University   **2010 – 2016**
Boca Raton, FL
- **Bachelor of Science in Ocean Engineering**
- **Capstone Project:** Full system designed and built prototype of an autonomous surface vehicle capable of GPS navigation and station keeping in dynamic conditions (Electrical Team Lead).

PROFESSIONAL EXPERIENCE

Course Instructor   **2021**
Florida Atlantic University, Boca Raton, FL
- Taught an undergraduate Fluid Mechanics course to a class of 30 students (in-person and remote).

Graduate Intern   **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   **2014-2015**
Agilis Engineering, Palm Beach Gardens, FL
- Assembled computer monitoring and signal conditioning systems used on GE turbines for NextEra and analyzed real-time turbine data for monthly reports for Florida Power and Light.

RESEARCH

Publications
- Jagodinski, E., Zhu, X., Verma, S., **Data-driven identification of dynamically important regions in turbulent flows using 3D Convolutional Neural Networks** (*submitted*) Autonomously identified critical regions in turbulent flow using 3D convolutional neural networks and a custom modified interpretation technique. Applied advanced data science methods to analyze efficacy of the technique.

Conference Presentations
- **Data-Driven blowing-suction control in a turbulent channel flow.** APS Division of Fluid Dynamics (2021)
- **Convolutional neural networks for identifying coherent turbulent structures.** APS Division of Fluid Dynamics (2019)

Conference Posters
- **Turbulent flow identification using 3D convolutional neural networks** FAU Data-Driven Science and AI Conference (2021)

CERTIFICATIONS

- **Google Data Analytics Specialization** (2022) A professional certificate through Coursera on preparing, processing, analyzing and presenting data. (SQL, Tableau, R)
- **Offshore Engineering Graduate Certificate** (2018) A graduate level specialization. Courses: Advanced Hydrodynamics, Offshore Structures, Hydrodynamics of Ship Design.

SKILLS

- Python, Fortran, MATLAB, C++, Bash, R, SQL
- TensorFlow, Keras, CNN, LSTM, Deep RL, PCA, Data Science
- Git, Linux, HPC, DDT, Slurm, Tableau