
Erdem M. Karaköylü <erdemk@protonmail.com>

EXPERIENCE

Research Innovations Inc.

2019 – present

Data Scientist

- Deep Learning for NLP applications
- Uncertainty estimation for Deep Learning.
- Graph Analytics for information flow modeling.

SAIC

2013 – 2019

Data Analyst, NASA Ocean Biology Processing Group, NASA Goddard Space Flight Center

- Probabilistic machine learning experimentation for the PACE mission
- Bayesian modeling for environmental applications
- Presentation of tutorials on Python data analysis and Bayesian inference.
- Machine Learning best practices

University of Maryland Center for Environmental Science

2011 – 2013

Associate Research Scientist

- Assessment of marine fish spawning location impact on population dynamics.
- Blending of coastal circulation models with *Individual-based Coupled Physical-Biological Model*.

Scripps Institution of Oceanography, University of California San Diego

2010 – 2011

Consultant

- Design and execution of experiments through the implementation of coastal ocean circulation models for engineering applications.

RELEVANT TECHNICAL SKILLS

- *Computing skills:* Python data science stack incl. numpy, scipy, Pandas, Scikit-learn, Pytorch, Pymc3, Matplotlib, Seaborn; Requests, BeautifulSoup, Git and Github/Bitbucket. Prefer to work in Linux/OSX.
- *Relevant Coursework:* Linear Algebra, Differential Equations, Fluid Dynamics, Mathematical Analysis, Probability and Statistics, Bayesian Data Analysis and Modeling.

EDUCATION

Scripps Institution of Oceanography, University of California San Diego

2003 – 2010

Ph.D. in Oceanography

- Thesis: "The foraging sorties hypothesis; effects of gut dynamics on copepod foraging behavior"
- Development of visualization approach for remote sensing of zooplankton gut content
- Compilation and analysis of gut content time series
- Development of agent-based models

Florida Institute of Technology

1997 – 2001

B.Sc. Oceanography

- Senior thesis: bio-optical modeling of planktonic algae, conducted at the Woods Hole Oceanographic Institute.

LANGUAGES

- ENGLISH: Fluent.
- FRENCH: Mother tongue.
- SPANISH: Quasi fluent (4 years of High School in Santiago, Chile).
- TURKISH: Fluent.