

WELCOME STUDENTS !!!!!



ENV872 - ENVIRONMENTAL DATA ANALYSIS (EDA)

Lab 1- Course Overview and Introductions

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Agenda

- Instructors and TAs Introductions
- Students Introductions
- Syllabus
 - Proposed Class Schedule
 - Course Format and Grading
 - Resources

Instructor Introduction

Luana Lima

A Little About Myself and Education

Born in Rio de Janeiro, Brazil











But I grew up in Itajubá, MG



A Little About Myself and Education







Bachelor of Science, Electrical Engineering FEDERAL UNIVERSITY OF ITAJUBÁ, Brazil, 2005 Electrical Power Systems



Master of Science, Electrical Engineering
 FEDERAL UNIVERSITY OF ITAJUBÁ, Brazil, 2007



Invested Cost Related Price for Transmission Use: Drawbacks and Improvements in Brazil

Ph.D., Operations Research and Industrial Engineering

UNIVERSITY OF TEXAS, Austin, TX, 2011

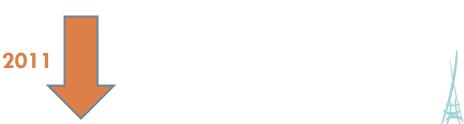


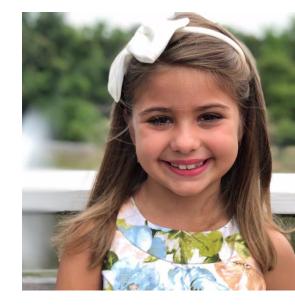
Modeling and Forecast of Brazilian Reservoir Inflows via Dynamic Linear Models under Climate Change Scenarios

A Little About Myself and Education



- Lived in Austin for 4.5 years
- □ Got married in 2008







- Back in Itajuba as a Pos-Doc and worked as consultant for MC&E
- Got an assistant professor position at UNIFEI
- Decided I needed a TA home,
 this is my daughter Clara (11 yrs)



A Little About Myself and my Education



- □ Lived there for 4 years
- And then...



- Back in the U.S., this time North Carolina
 - Had my second TA, my son Lucas (7yrs)
 - Joined NSOE in Jan 2018



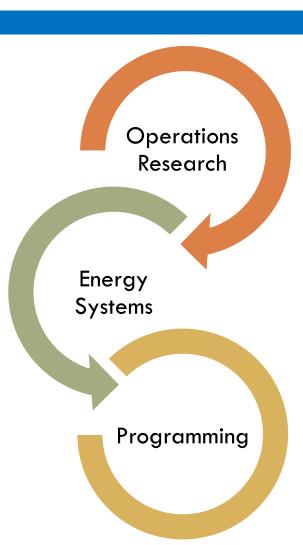


My Teaching & Research Experience

Power System Economics

Climate Change Effects on Energy Supply

Co-Optimization of Water & Energy Systems



- Data Analytics
- Time Series Modeling and Forecast
- Mathematical Programming
- Stochastic Optimization
- Decision Making

- R, Python, Matlab
- GAMS
- C++, Fortran

Instructor Introduction

John Fay

Introductions

BA Biology & Environmental Studies

Bowdoin

MSc Conservation Biology & Ecosystems Management



GIS Manager at Stanford's Jasper Ridge Biological Station

GIS Manager at Stanford's Ctr. for Conservation Biology



2005 Research associate/Instructor at NSOE







TAs Introduction

Li Gia Go Emma Kaufman



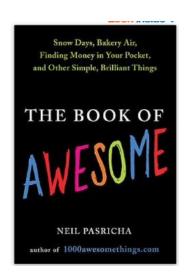


Student Introductions

Students Intro + Activity

The Book of Awesome by Neil Pasricha is filled with simple, everyday pleasures that bring joy and positivity to our lives

- Popping bubble wrap
- The smell of rain on a hot sidewalk
- The other side of the pillow
- Hitting a bunch of green lights in a row
- Waking up and realizing it's Saturday
- When the cashier opens a new lane at the grocery store
- The moment at a concert after the lights go out and before the band comes on stage
- When you're really tired and about to fall asleep and someone throws a blanket on you
- Finding an old mix tape
- High-fiving babies
- Snow days

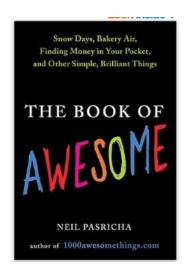


Students Intro + Activity

Activity:

"Discovering Common Awesome Moments"

 In small groups (2-3) introduce yourselves and identify one or more common awesome moments you have experienced



 Groups introduce themselves to the rest of the class and one representative from each small group will share the common awesome moments their group discovered

Course Overview

Class logistics

- Sakai & Class web site: https://env872.github.io
- GitHub site

Assignments downloaded from Git but submitted via Sakai (knitted pdf)

- Syllabus/Course overview
- □ Lesson 1...
 - Class set up: Where to execute R code?
 - NSOE Machine, RStudio container, personal machine?
 - Intro to Git & GitHub:
 - Fork & clone the class repository
 - Watch 1st lecture: "Intro to Data Analytics"
 - What is it? Data types? Intro to RStudio

For next week...

- Module 0: "Class setup"
 - Sign up to Slack site
 - Setup GitHub account & class repository
 - Set up Class workspace/Rstudio

Recordings available...

- Module 1: "Intro to Data Analytics"
 - Watch recorded lecture...
 - Do assignment 1...
- → Get all questions/tech issues resolved ...

For the following week...

Ensure all tech issues have been addressed

Complete Assignment 1 by EOD Wednesday 1/17

- Watch recordings for M2 "Coding Basics"
 - Q&A on recordings & in-class exercises next Thursday
 - Assignment 2 will be released EOD Thurs & due following Tues



THANK YOU!

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