**Resources for GAM Exploration**

**GAM**

**Part of stat course with example of applying GAM to ecological data**

<http://plantecology.syr.edu/fridley/bio793/gam.html>

See list of videos for GAM below

**Version Control**

**GIT-**Step by Step Setting up GIT with Rstudio.

Written for stat course, Online “book”, (has images with Oct. 2021 dates)

<https://happygitwithr.com/big-picture.html>

Slightly condensed version of above in journal paper format (2017)

https://peerj.com/preprints/3159v2/

**Google Docs**- Documents stored on server. Can have version control by naming stored versions.

No local/offline version control. Can share files but no branching and merge?

<https://en.wikipedia.org/wiki/Google_Docs>

G**IT** - Simplified summary of architecture and sharing and merging.

<https://www.freecodecamp.org/news/the-google-doc-of-coding-git-github-ec103e87926d/>

More indepth description of git and github and alternatives, aimed at Kinsta (wordpress product?) users

<https://kinsta.com/knowledgebase/what-is-github/>

https://kinsta.com/knowledgebase/git-vs-github/

**Github** guides

<https://docs.github.com/en/get-started/quickstart/hello-world>

<https://docs.github.com/en/get-started/using-git/about-git>

Using Google colab (Google docs) with GitHub. Search did not find any other info on Google Docs with GitHub

<https://medium.com/analytics-vidhya/how-to-use-google-colab-with-github-via-google-drive-68efb23a42d>

**Curve Fitting – Loess and GAM**

**Loess**

**is good for getting fast look at smoothed curve, however not good for evaluating models**

**Loess** – example varying span parameter and comparing SSE of results

<http://r-statistics.co/Loess-Regression-With-R.html>

VB:Did not work for root data, generally online comments suggest not suitable for finding “good fit”

“The loess function gives a straightforward way to create smooth responses for simple regressions, but its utility ends there: the fit is not based on likelihood and there is no easy way to compare whether this model fits better than other (e.g., parametric) models, nor is there a way to accommodate non-Gaussian error functions.“

from Fridley

GAM introductory videos