

## Digital Agriculture Calendar 2018

Month	Tuesday	Wednesday	Month	Tuesday	Wednesday
August	(21) Intro-Syllabus	(22) Beyond Excell-Vlab	October	(16) NN Implement HW7	(17) ML Overview
	(28) R-Python HW1	(29) Cloud Sharing		(23) Drones Intro HW8	(24) Image Basics
September	(4) Files HW2	(5) SQL Intro		(30) Image Basics HW9	(31) Image Analysis
	(11) SQL Advanced HW3	(12) ArcGis Intro	November	(6) Sensors HW10	(7) Time Series
	(18) ArcGis Advanced HW4	(19) Overview Databases		(13) Statistics HW11	(14) Modeling
	(25) Intro to ML HW5	(26) Basic Tools		(20) HT for Databases HW12	(21) OFF
October	(2) SVM's HW6	(3) NN intro		(27) Project Presentations	(28) Project Presentations

<u>Databases:</u> <ul style="list-style-type: none"> <li>• Beyond Excell: R, Python, SAS, ArcGis, Matlab</li> <li>• Cloud Sharing: OneDrive, GoogleDrive, DropBox, Gitlab, GitHub, Multiple Collaborators</li> <li>• Filetypes: Common file types, Structure protocols, Conforming</li> <li>• SQL: Installing, Basic Operations</li> <li>• ArcGis: Installing, Basic Operations</li> </ul>	<u>Basic Machine Learning tools:</u> <ul style="list-style-type: none"> <li>• ML Introduction</li> <li>• Basic Tools: Decision Trees, Random Forests</li> <li>• Support Vector Machines: Intro, Implementation</li> <li>• Neural Networks: Intro, Implementation</li> <li>• Ensemble Techniques: Model Selection, Algorithms</li> </ul>
<u>Image Analysis and Drones:</u> <ul style="list-style-type: none"> <li>• Technical Characteristics: Flight protocols, Acquiring, Legislation</li> <li>• Image basics: Capturing, transfer, storage, pre-processing, compression, synthesis and security</li> <li>• Image analysis: Matlab, ImageJ, ArcGis</li> </ul>	<u>Data Analysis:</u> <ul style="list-style-type: none"> <li>• Sensors: Time series analysis</li> <li>• Statistics for Machine Learning</li> <li>• Multi-linear Models</li> <li>• Synthesis and Hypothesis testing on databases</li> </ul>