

# Project Plan

Milestones	Deadline	Tasks
#1 Complete assigned projects left from last semester.	2/12	<ul style="list-style-type: none"> <li>• Implement fairness for fair completely random forest algorithm (James)</li> <li>• Improve accuracy issues with fair completely random forest algorithm. (James)</li> <li>• Find dominant feature that affects bias (Rui)</li> <li>• Find intersectional bias in math and language sets. Work on transfer learning. (Kun)</li> <li>• Complete FERPA training (James, Rui, Kun)</li> <li>• Begin process of accessing University dataset and clean data. (Kun)</li> </ul>
#2 Work on improving algorithms we have been developing. Start experiments on University data.	2/26	<ul style="list-style-type: none"> <li>• Begin running experiments on University dataset to discover bias. (Kun)</li> <li>• Implement algorithm to automatically intersectional bias detection. (Rui)</li> <li>• Investigate fairness tradeoff in other models (James)</li> <li>• Start replicating existing fair random forest to compare algorithm against (James)</li> </ul>
#3 Begin process of combining separate tasks into one algorithm. Continue experiments on University data.	3/11	<ul style="list-style-type: none"> <li>• Begin combining intersectional bias detection with fair completely random forest algorithm. (James and Rui)</li> <li>• Run experiments to compare our fair algorithm with existing fair random forest algorithm (James)</li> <li>• Run fairness experiments using the completely fair random forest algorithm on the University dataset. Compare with traditional algorithms. (Kun)</li> </ul>
#4 Finish combining separate tasks into one algorithm.	3/25	<ul style="list-style-type: none"> <li>• Finish combining intersectional bias detection with fair completely random forest algorithm. (James and Rui)</li> <li>• Prepare summary of initial experiment findings. (Kun)</li> <li>• Discuss findings on University dataset with</li> </ul>

		registrar. (Kun) <ul style="list-style-type: none"> <li>• Discuss future use of fairness algorithm with registrar. (James and Rui)</li> </ul>
#5 Fix any bugs and issues with the algorithm.	4/8	<ul style="list-style-type: none"> <li>• Fix bugs and issues with the combination of the fair completely random forest algorithm. (James and Rui)</li> <li>• Prepare algorithm to be useable for registrar's office (James and Rui)</li> <li>• Prepare data results in well formatted tables. (Kun)</li> </ul>
#6 Finish the project and collect final results.	4/22	<ul style="list-style-type: none"> <li>• Finish collecting any data results needed. (James, Rui, Kun)</li> <li>• Finish Powerpoint presentation for undergraduate research day. (James, Rui, Kun)</li> </ul>