

# **IBM HACK CHALLENGE 2023**

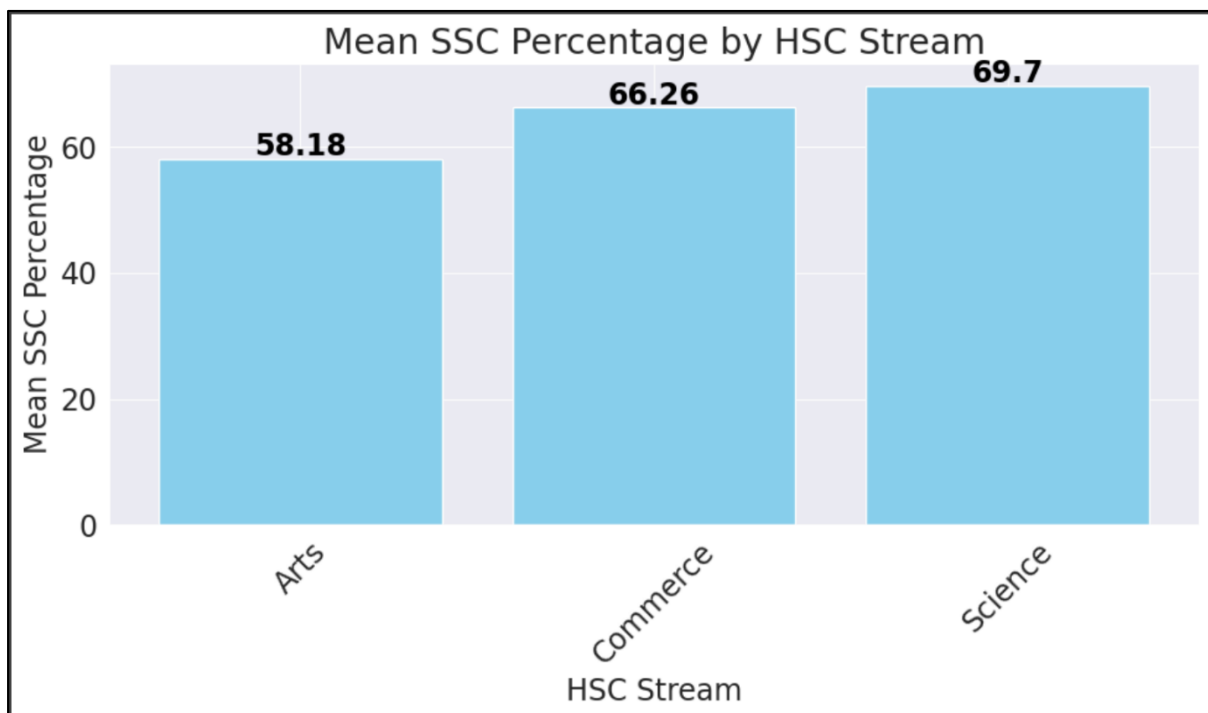
## **TEAM QUADRUPLE**

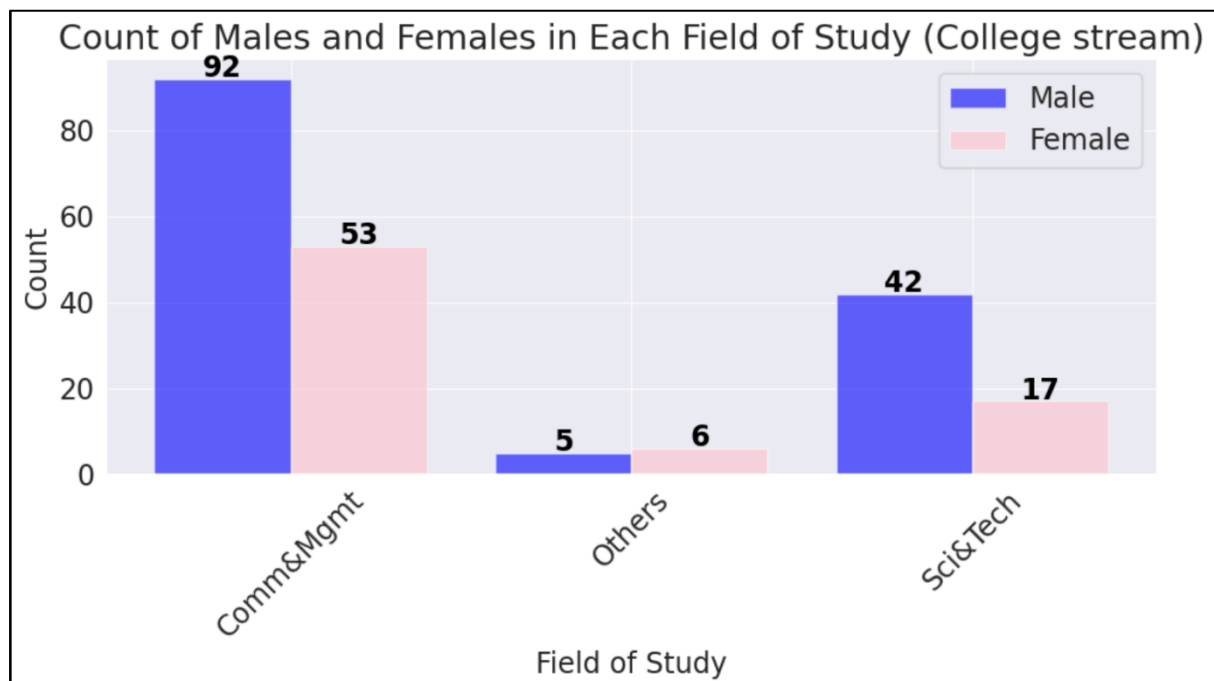
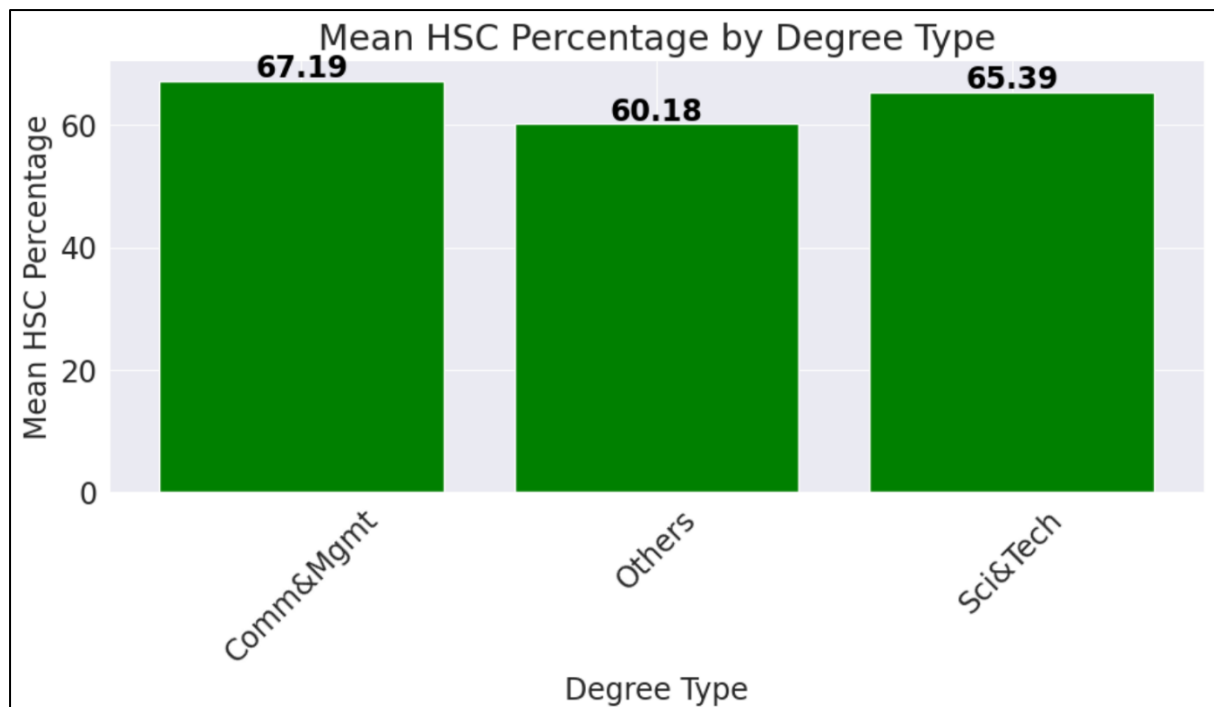
### **APPLIED DATA SCIENCE TRACK**

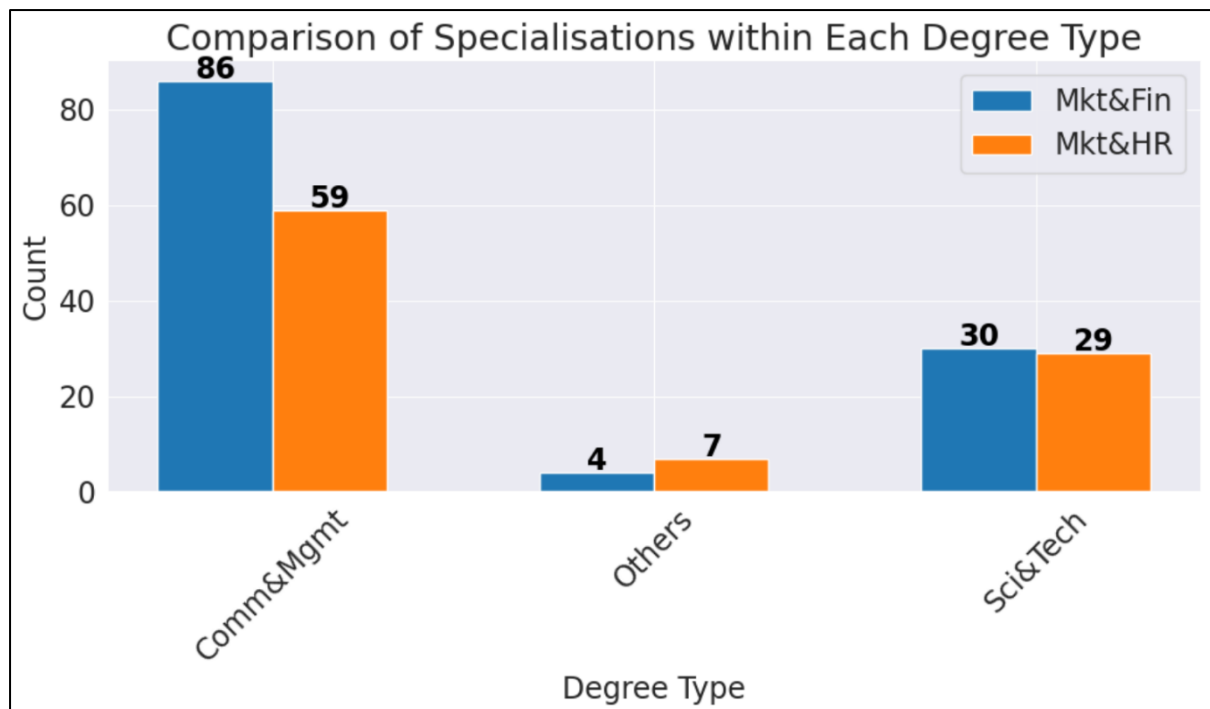
#### **PROJECT REPORT**

#### **Identifying Patterns and Trends in Campus Placement Data using Machine Learning**

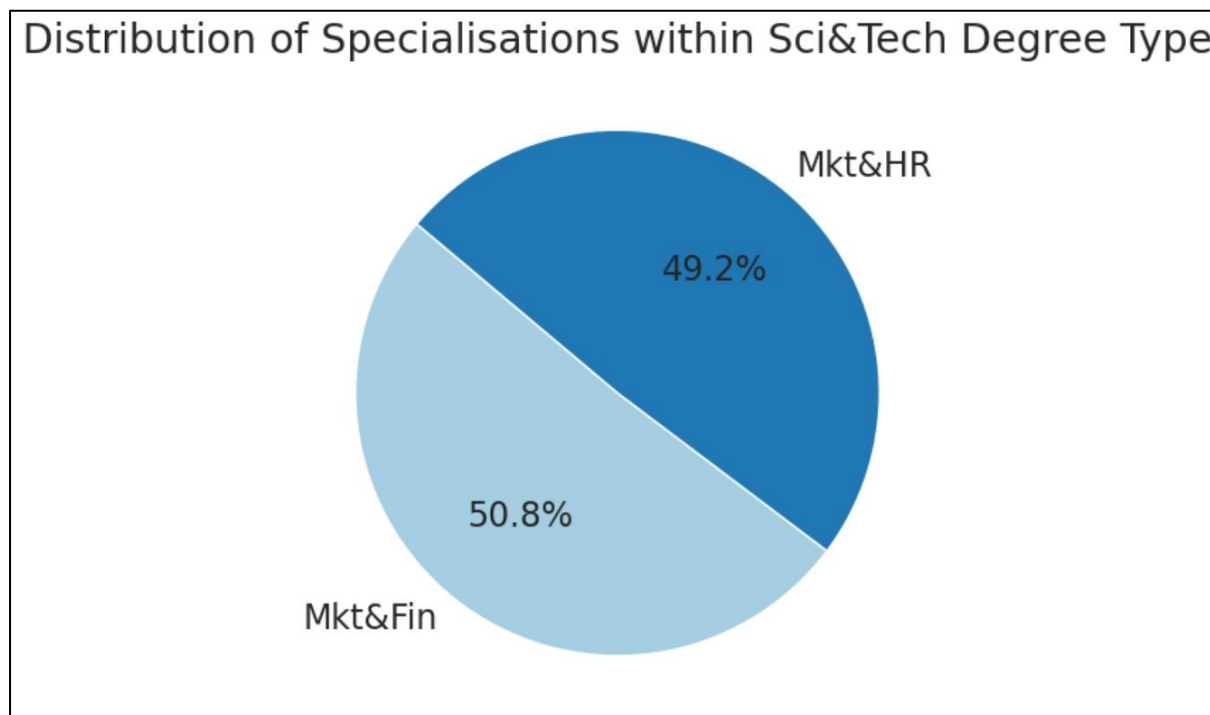
##### **Results Obtained:**



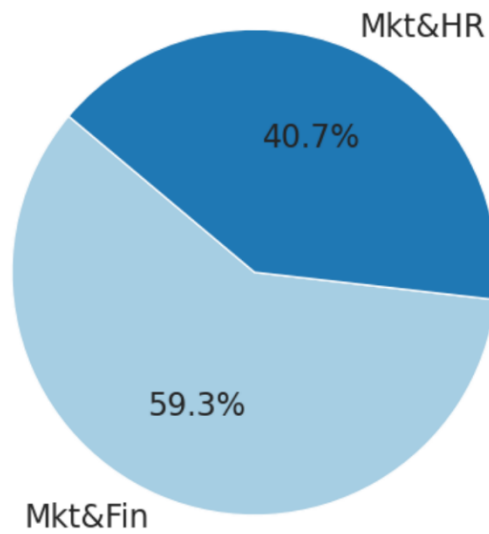




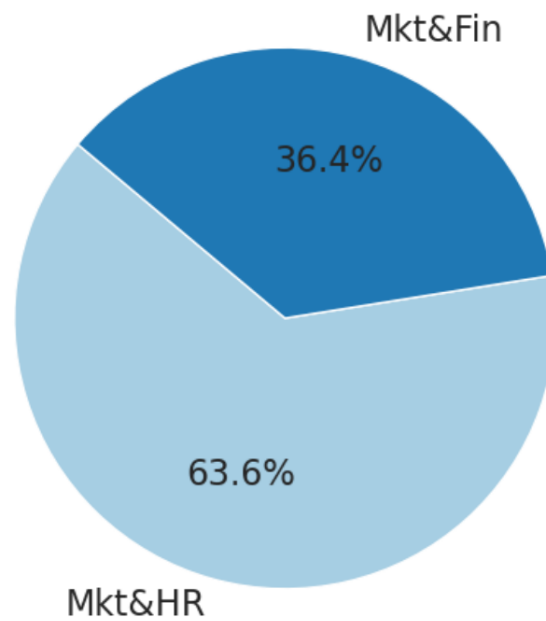
### Distribution of Specialisations within Sci&Tech Degree Type

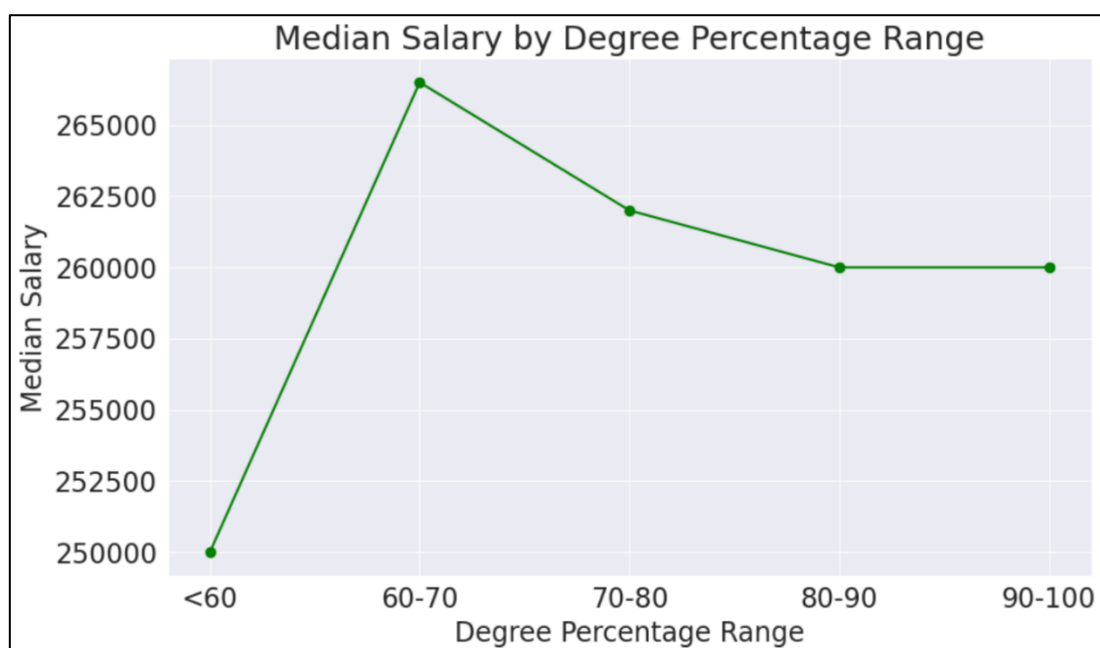
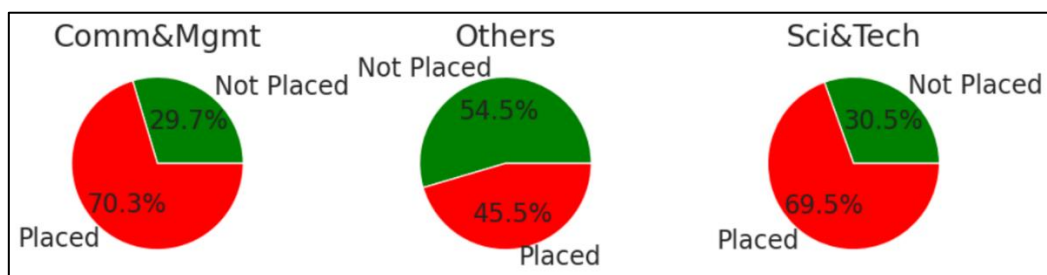
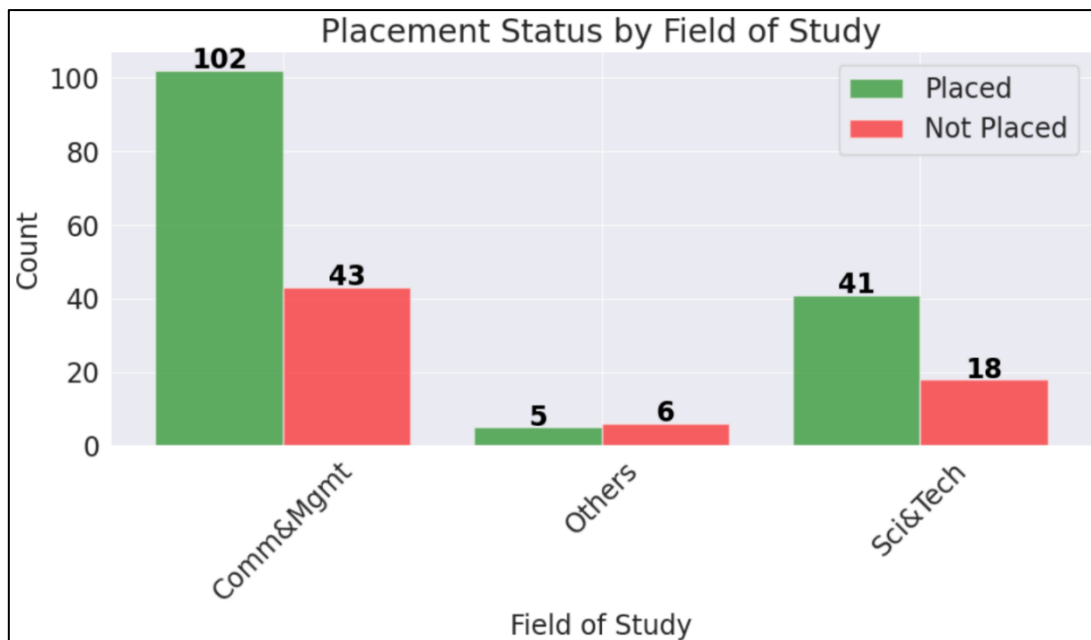


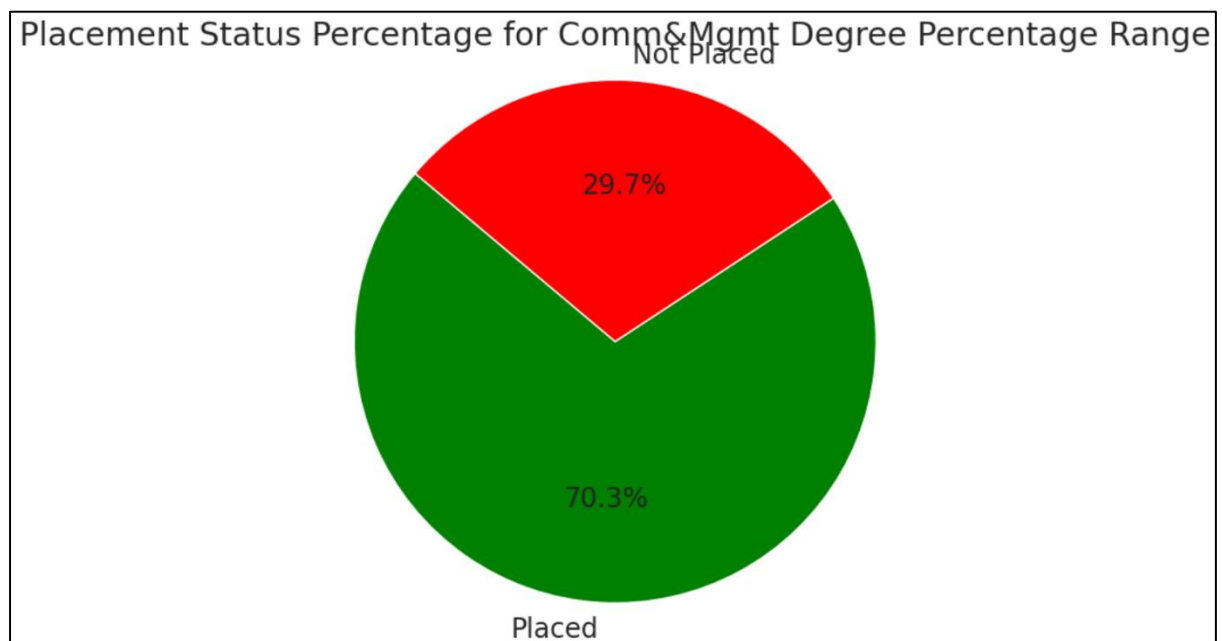
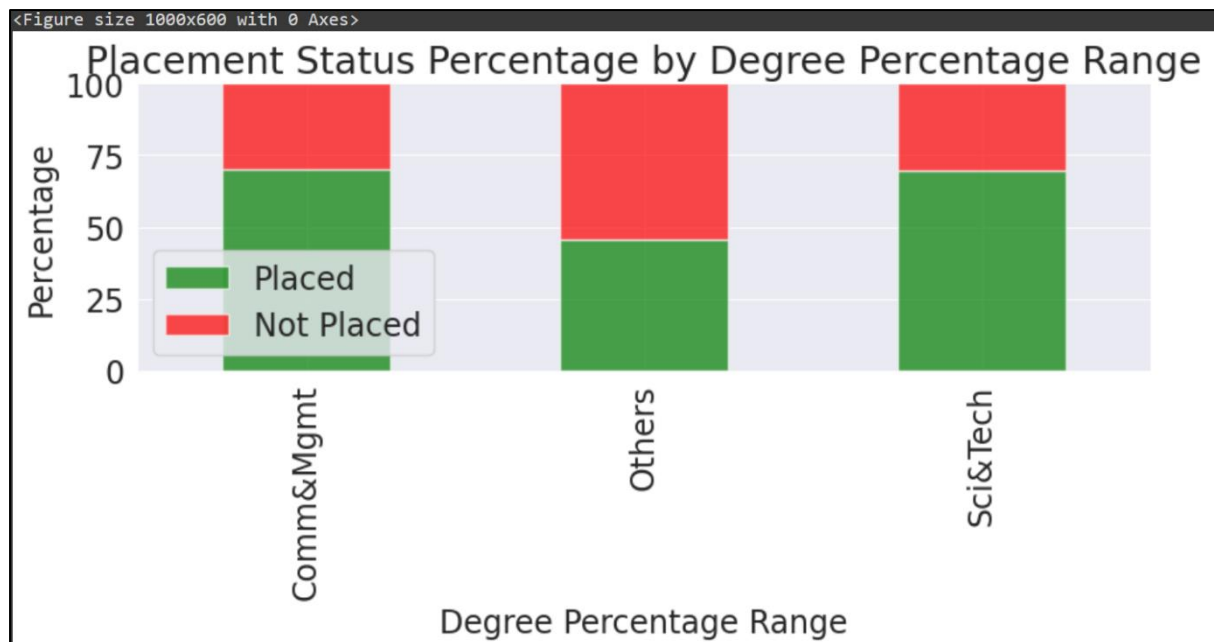
Distribution of Specialisations within Comm&Mgmt Degree Type



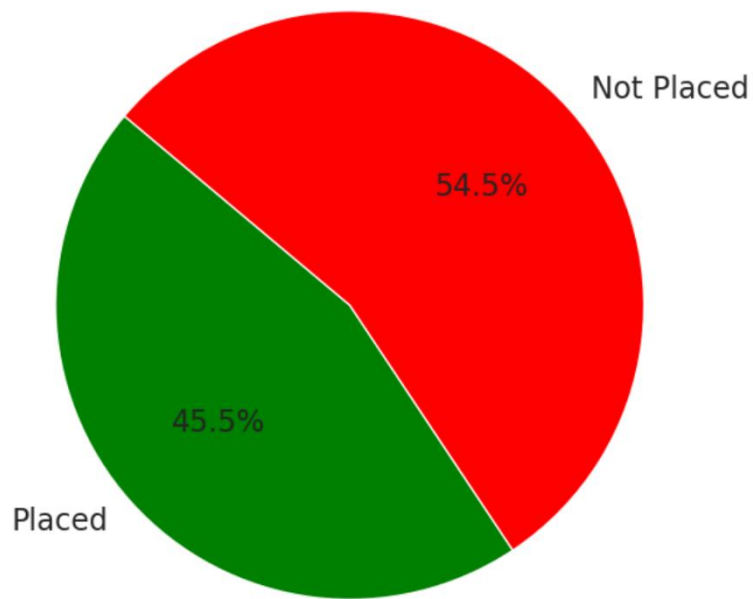
Distribution of Specialisations within Others Degree Type



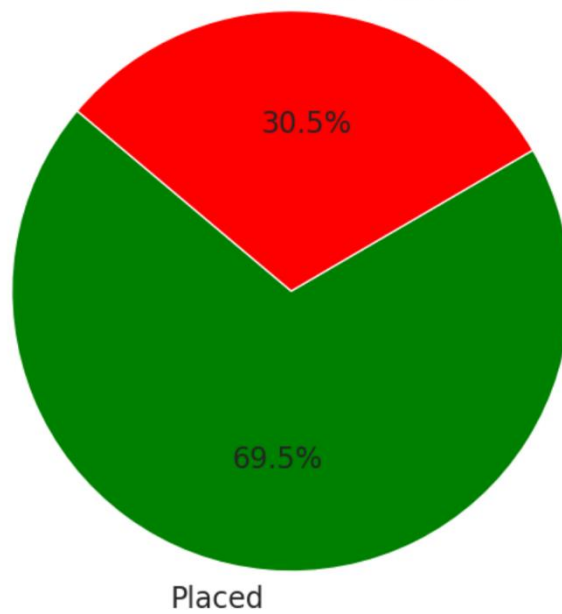


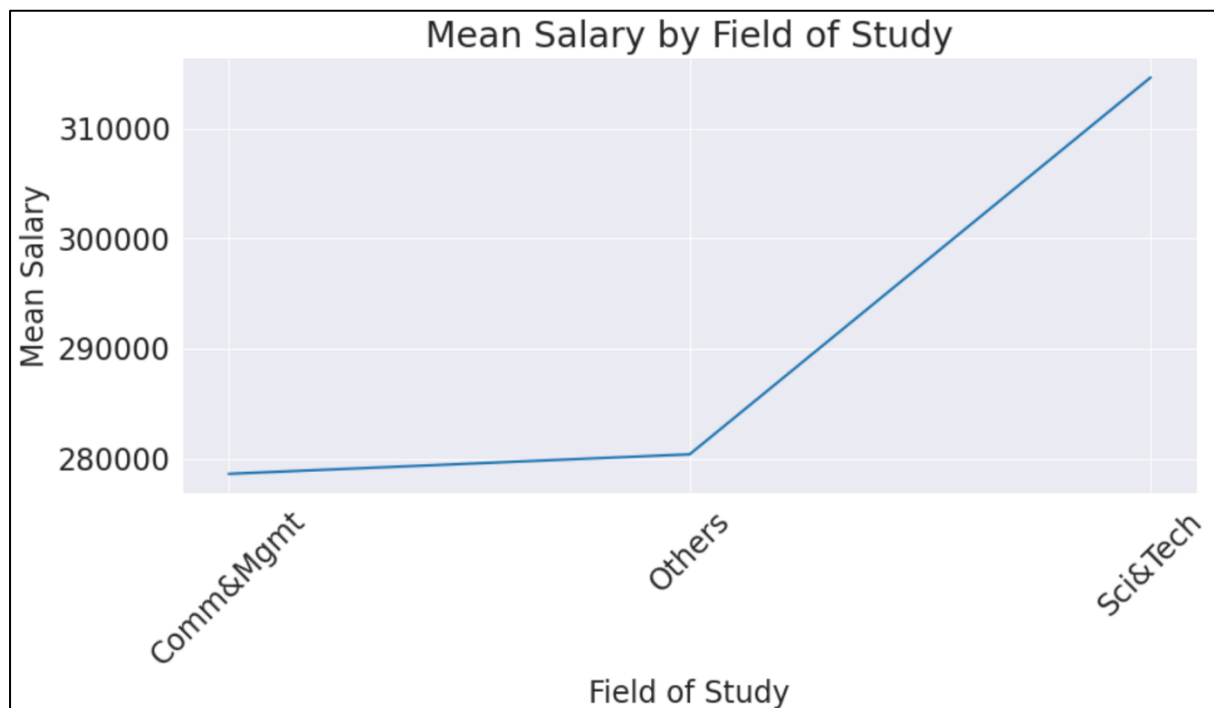
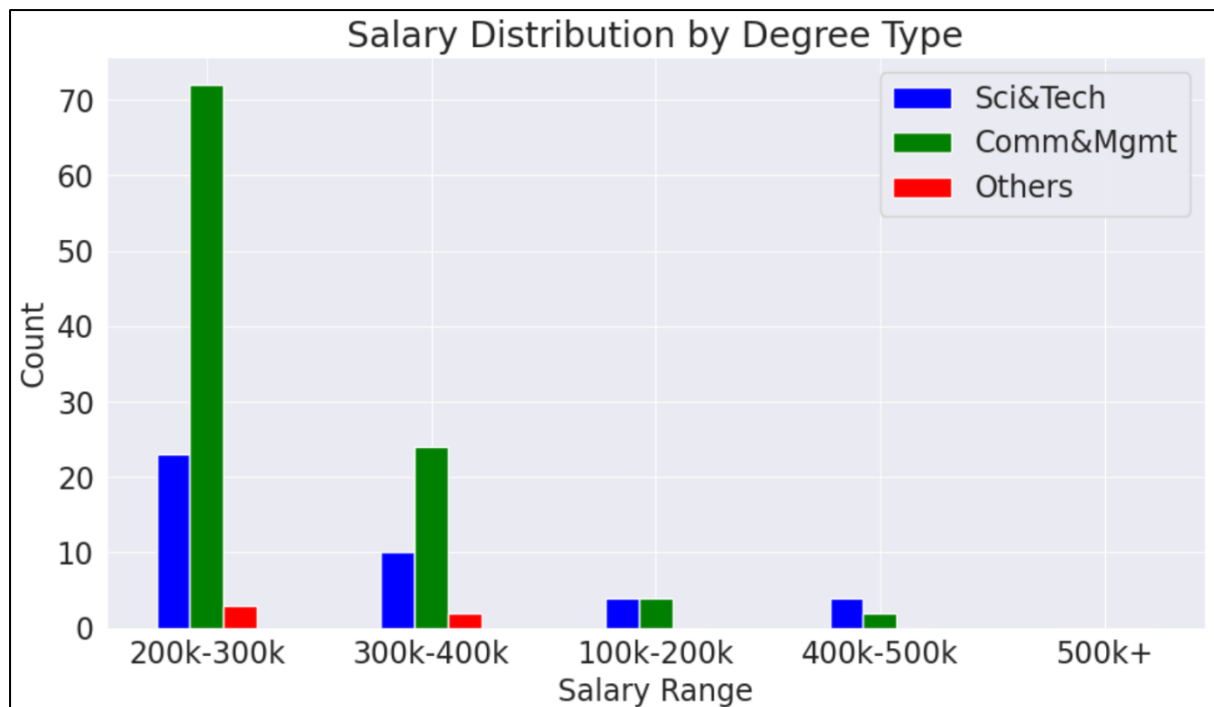


Placement Status Percentage for Others Degree Percentage Range

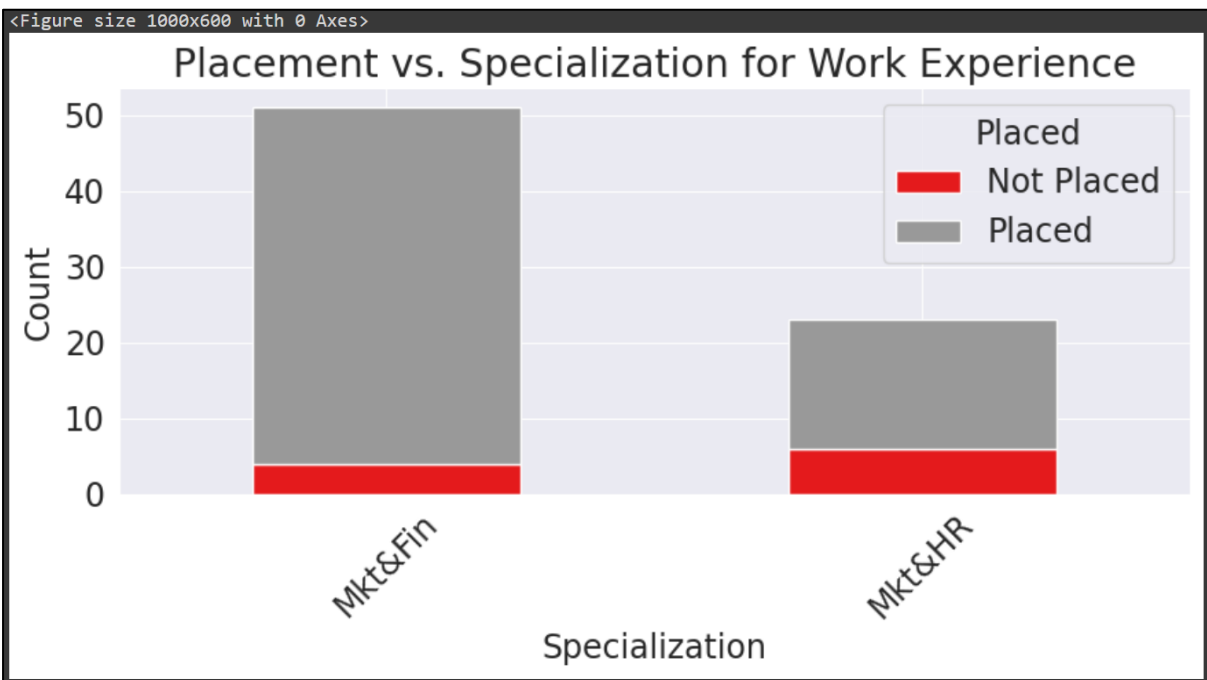
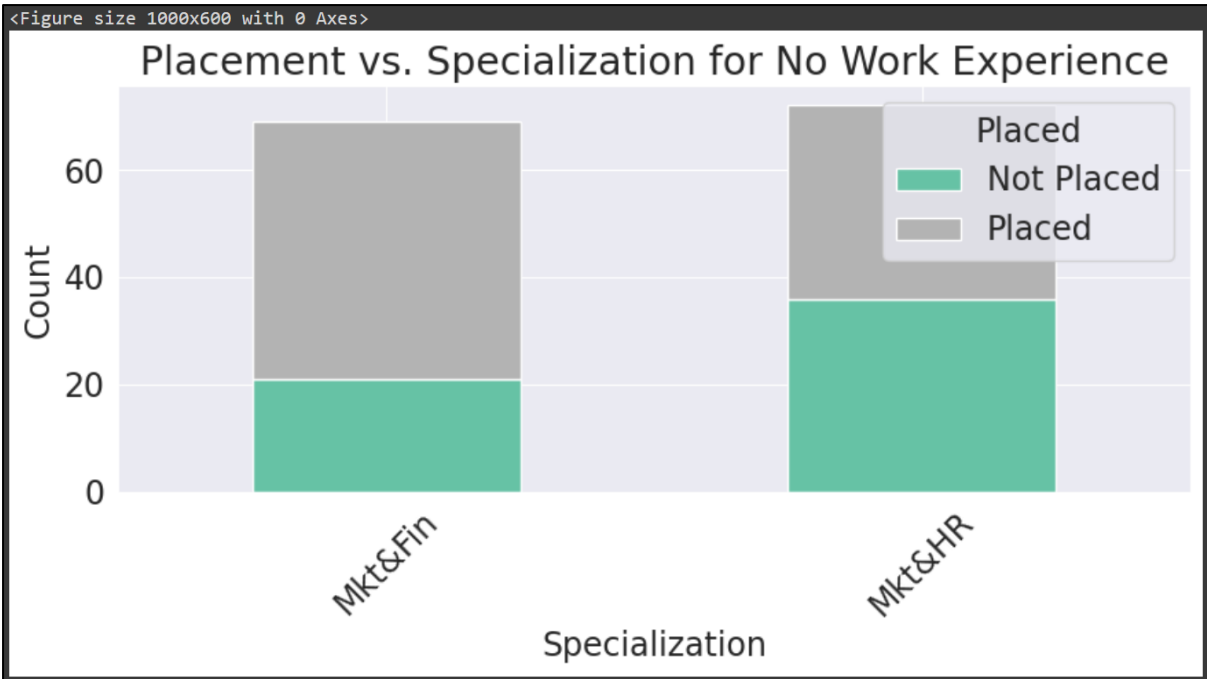


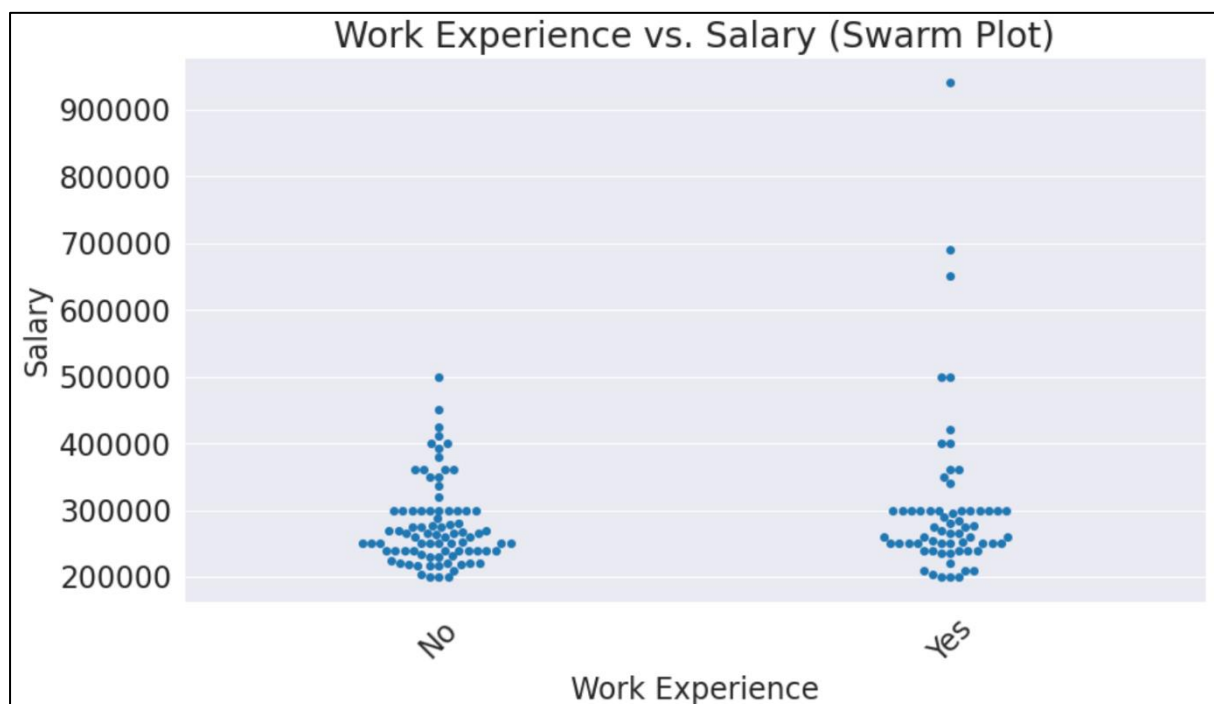
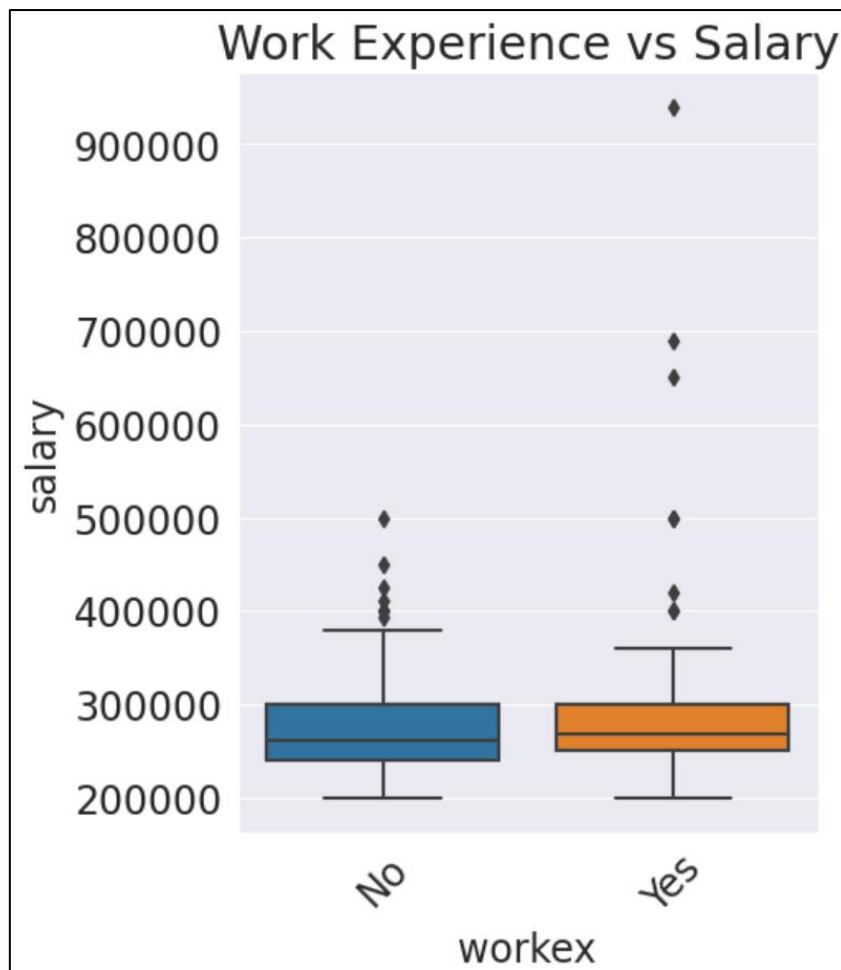
Placement Status Percentage for Sci&Tech Degree Percentage Range

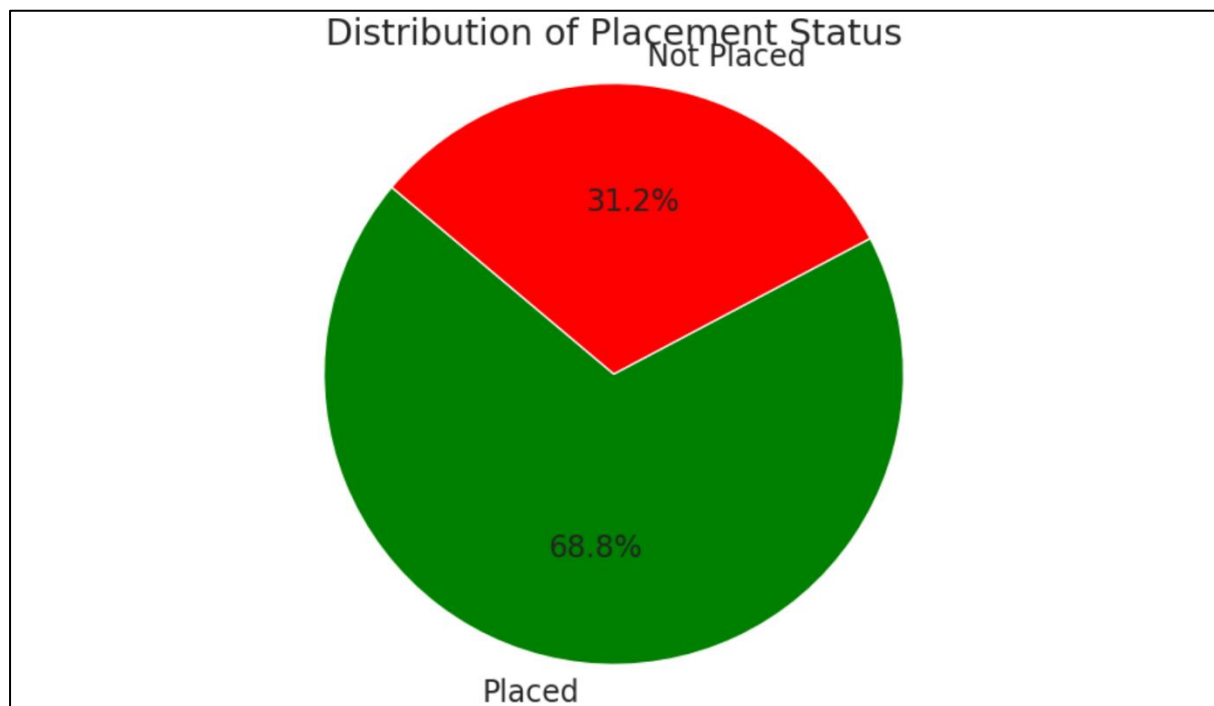
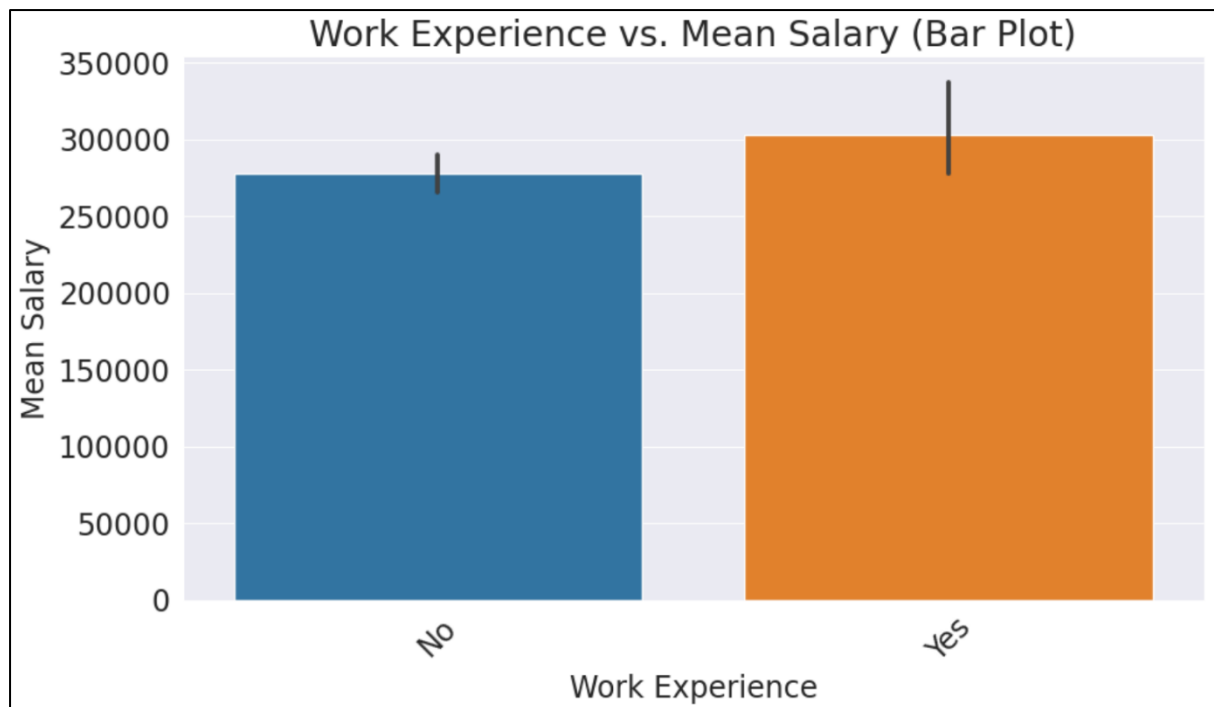


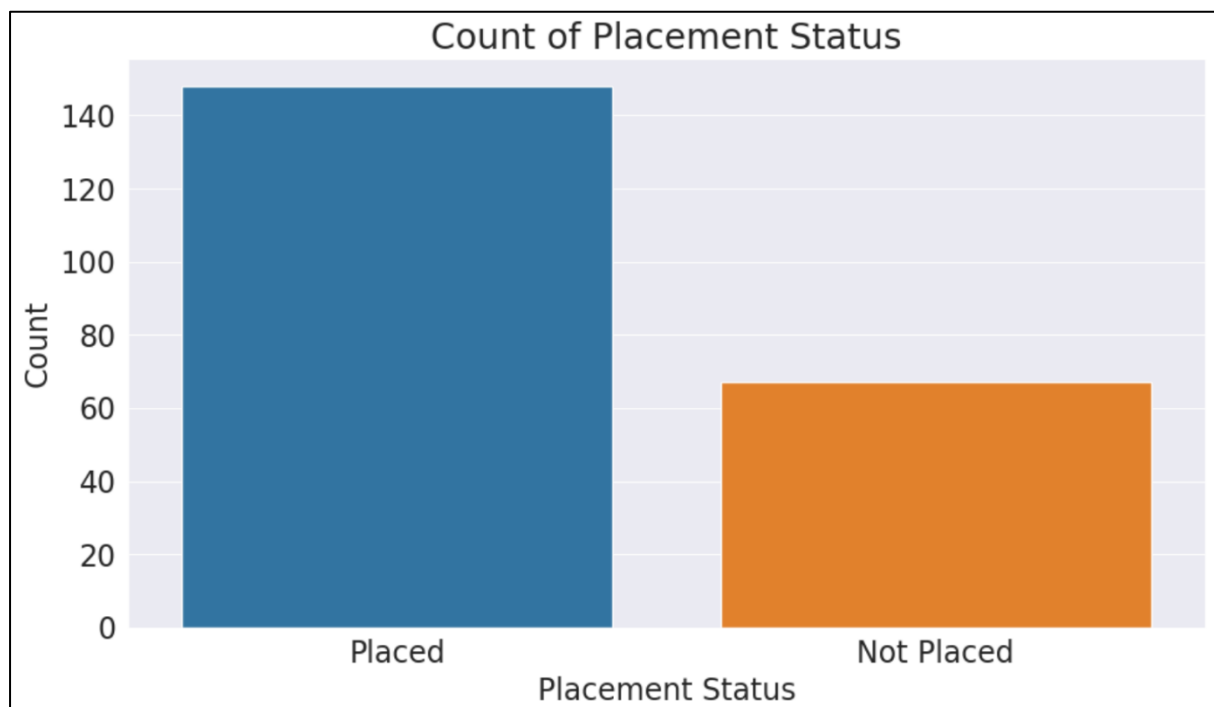
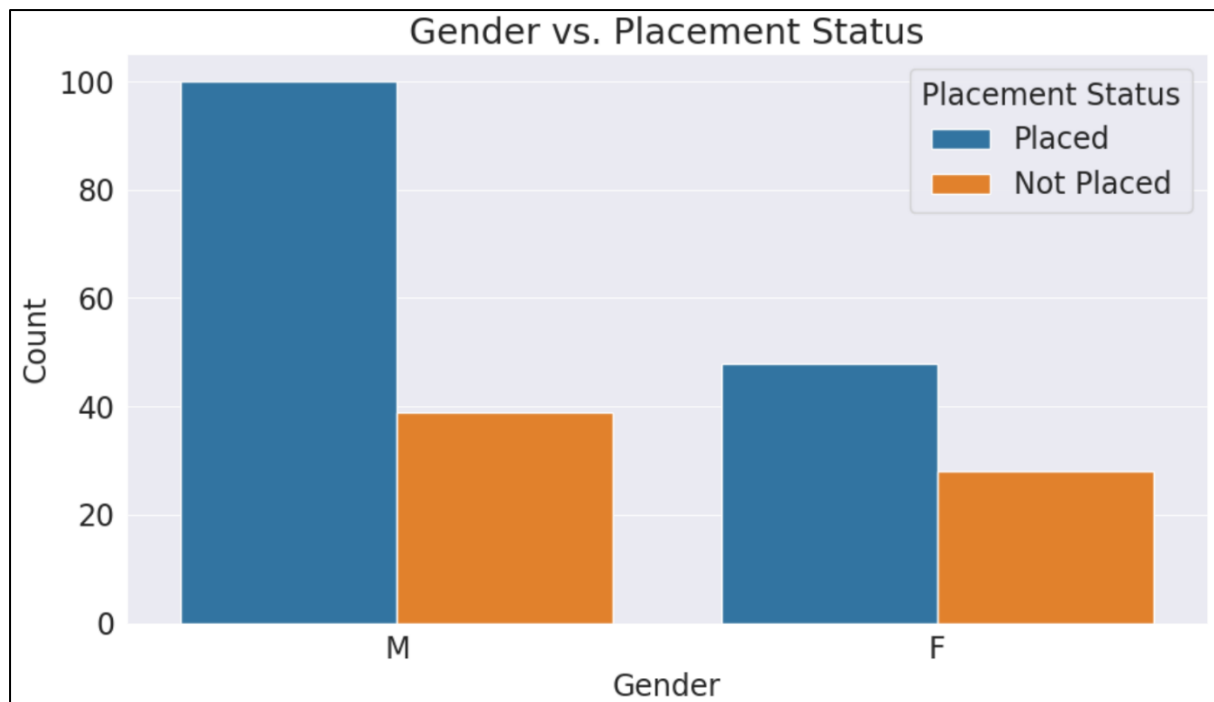


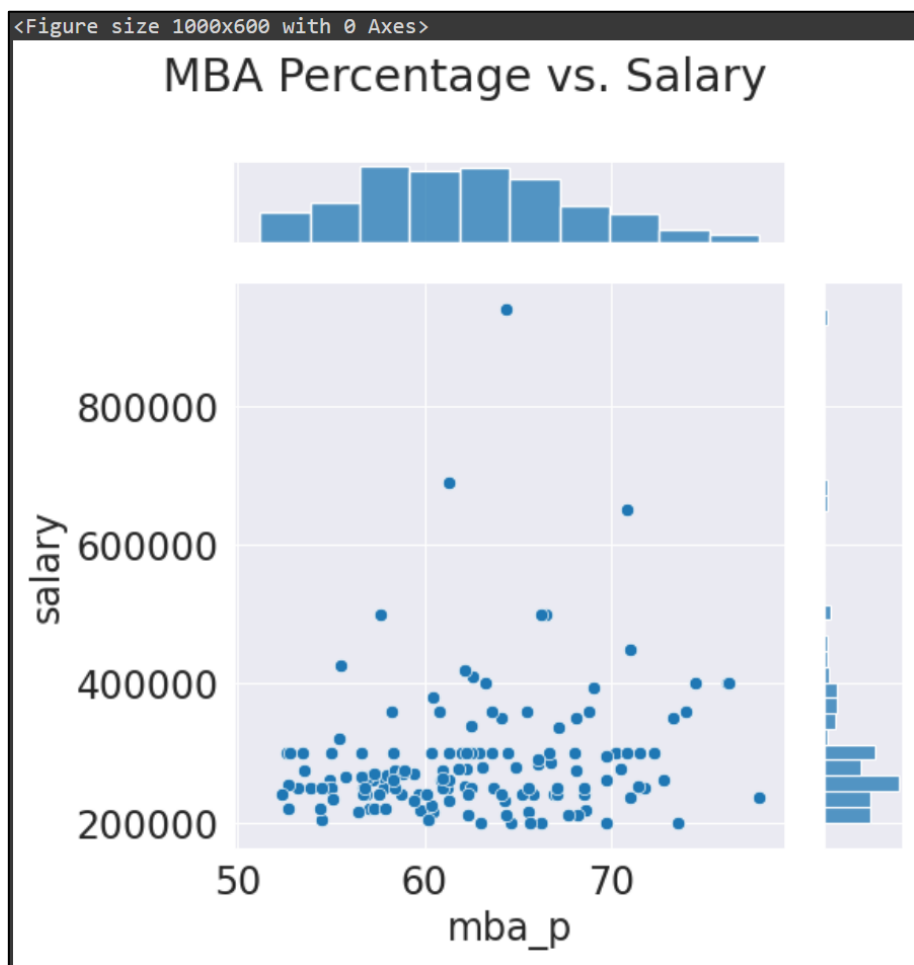
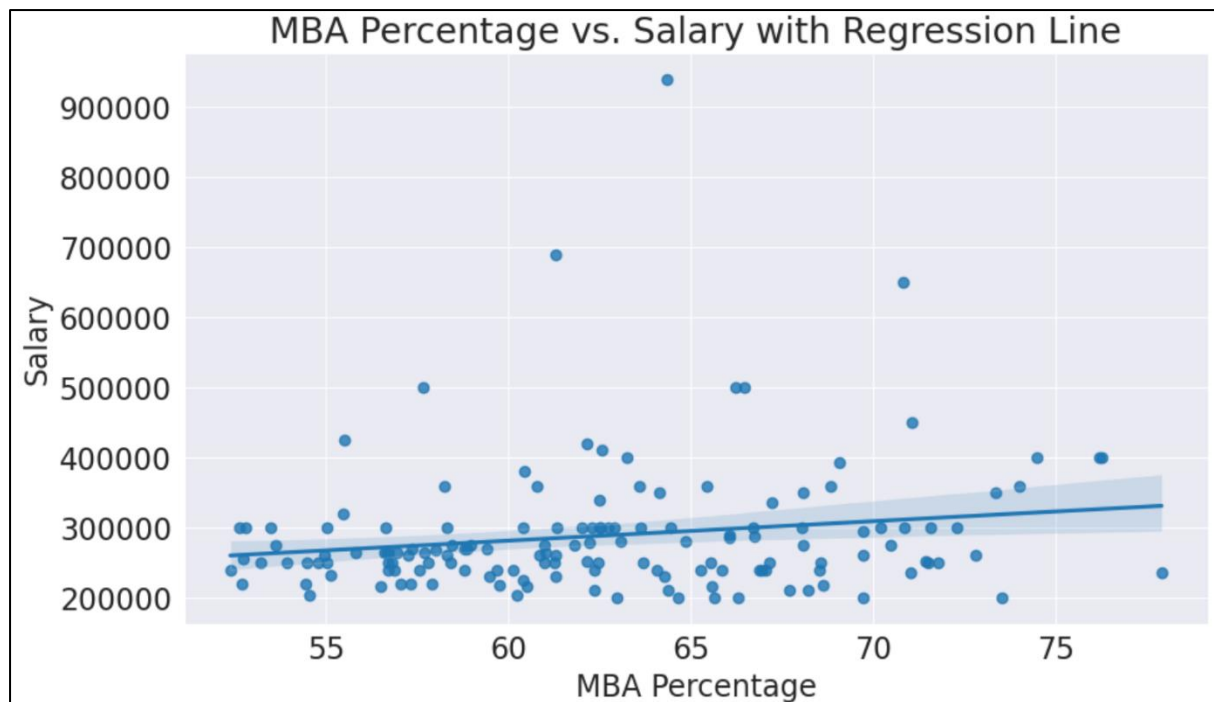




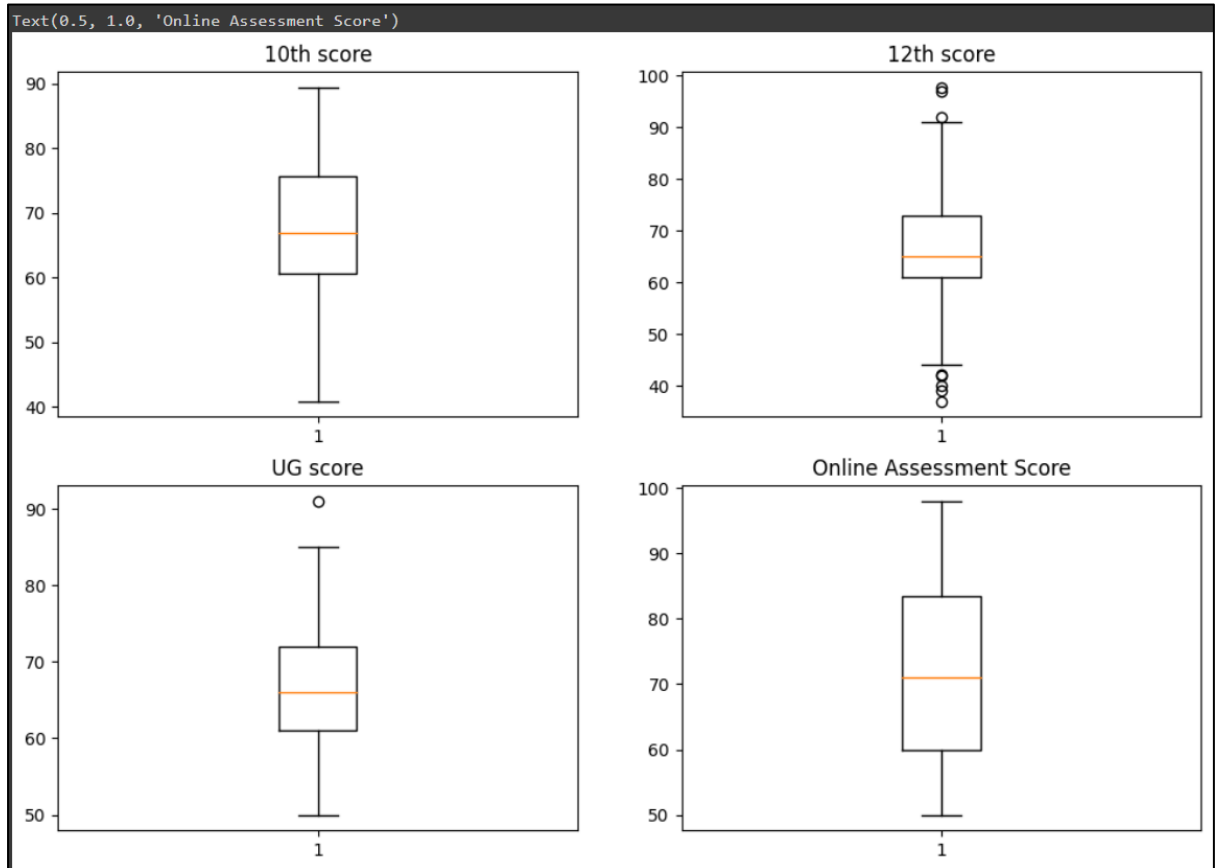


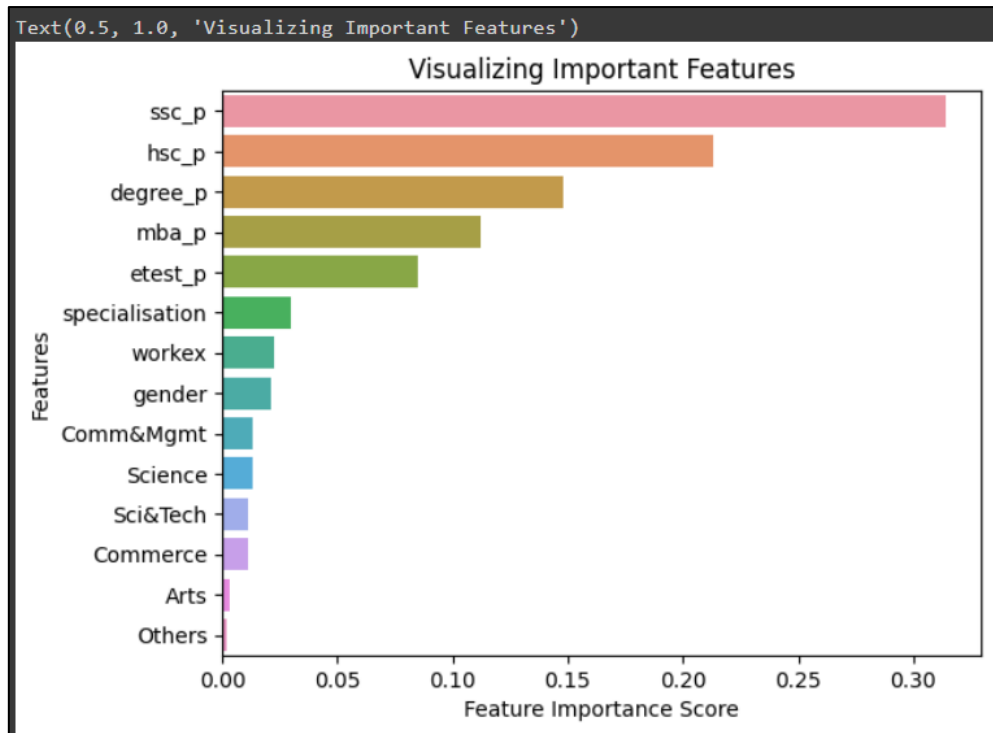






	sl_no	gender	ssc_p	ssc_b	hsc_p	hsc_b	hsc_s	degree_p	degree_t	workex	etest_p	specialisation	mba_p	status	salary
0	1	M	67.00	Others	91.00	Others	Commerce	58.00	Sci&Tech	No	55.0	Mkt&HR	58.80	Placed	270000.0
1	2	M	79.33	Central	78.33	Others	Science	77.48	Sci&Tech	Yes	86.5	Mkt&Fin	66.28	Placed	200000.0
2	3	M	65.00	Central	68.00	Central	Arts	64.00	Comm&Mgmt	No	75.0	Mkt&Fin	57.80	Placed	250000.0
3	4	M	56.00	Central	52.00	Central	Science	52.00	Sci&Tech	No	66.0	Mkt&HR	59.43	Not Placed	NaN
4	5	M	85.80	Central	73.60	Central	Commerce	73.30	Comm&Mgmt	No	96.8	Mkt&Fin	55.50	Placed	425000.0





## **MACHINE LEARNING MODEL RESULTS:**

Accuracy of logistic regression classifier on test set: 0.8333333333333334

Accuracy of KNN on test set: 0.7619047619047619

Cross-validation precision: 0.720728

Model 4: accuracy

Accuracy: 0.7380952380952381

Model 5: accuracy

Accuracy: 0.7857142857142857

\*\*\*