An Automated Object-Task Mining Model for Providing Students with Real Time Performance Feedback

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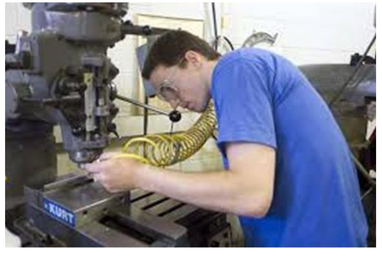
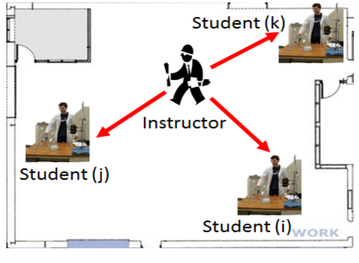
Research Motivation

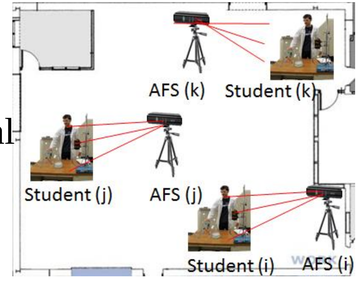
The student-instructor ratio makes it difficult for students to receive real time, personalized feedback



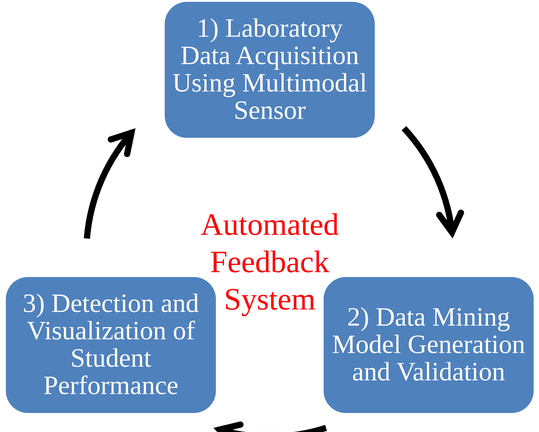


Research Objectives

Automated Feedback System that provides students with real time, personalized feedback

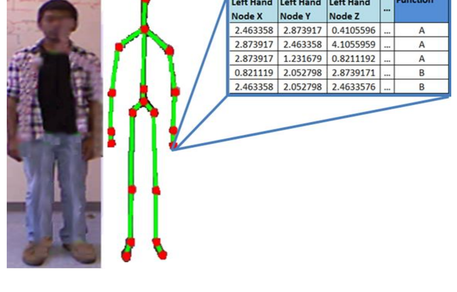


Research Methodology



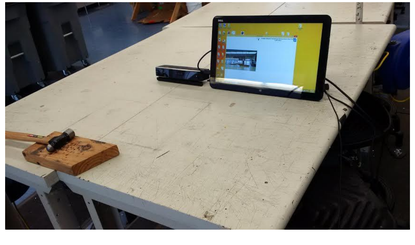
Object Detection

Student Task Identification



Left Hand Node X	Left Hand Node Y	Left Hand Node Z	...	Function
2.463358	2.873917	0.4105596	...	A
2.873917	2.463358	4.1055959	...	A
2.873917	1.231679	0.8211192	...	A
0.821119	2.052798	2.8739171	...	B
2.463358	2.052798	2.4633576	...	B

Case Study



Path Forward

Investigate differences in students' performance during STEM laboratory activities

Acknowledgements

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