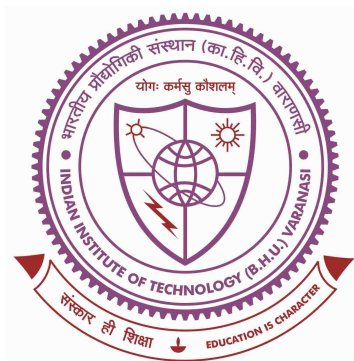


# Effective Learning Models on Pattern Mining Applications



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Doctor of Philosophy

by

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