

California State University San Bernardino  
School of Computer Science and Engineering  
**CSE 595 Undergraduate Independent Study**

**Date**

October 1, 2019

**Time**

12:00PM

**Location**

Contact Monica

**Title**

Algorithm to Prove Caro-Wei Theorem

**Student**

Richard Vargas

**Advisor**

Dr Owen Murphy

**Abstract**

The Caro-Wei Theorem provides a lower bound for the independence number of a graph. A proof for this theorem is typically probabilistic but will be proven using a greedy algorithm.