

Fall 2021  
COMPUTER SCIENCE 5300

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ADVANCED ALGORITHM DESIGN AND ANALYSIS  
GROUP #1 PROPOSAL

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**1 What style your use, IEEE or MLA?**

IEEE

**2 Title of the topic**

Branch and Bound

**3 Group number and full names of all members.**

Rick Ramirez, Ruben Bramasco, Vikram Sai Kishan Sriram

**4 A brief description of the topic**

**5 Live or pre-recorded? For your team presentation.**

Pre-recorded

**6 At least five main references to recent books or technical articles you plan to use**

**References**

- [1] Flavio Baccari, Christian Gogolin, Peter Wittek, and Antonio Acín. Verifying the output of quantum optimizers with ground-state energy lower

bounds. *Physical Review Research*, 2(4):043163, 2020.

- [2] Ashley Montanaro. Quantum speedup of branch-and-bound algorithms. *Physical Review Research*, 2(1):013056, 2020.