

Project Problem Suggestions – BFS

Kattis

<https://open.kattis.com/problems/horror>

<https://open.kattis.com/problems/modulosolitaire>

<https://open.kattis.com/problems/erdosnumbers>

<https://open.kattis.com/problems/fire2>

<https://open.kattis.com/problems/grid>

<https://open.kattis.com/problems/interplanetarytunnels>

<https://open.kattis.com/problems/onaveragetheyrepurple>

USACO

<https://usaco.org/index.php?page=viewproblem2&cpid=1134> (Maze Tac Toe, Silver April 2021)

<https://usaco.org/index.php?page=viewproblem2&cpid=1184> (Cereal 2, Silver, January 2022)

Project Problem Suggestions – Geometry

Kattis

<https://open.kattis.com/problems/bee-hives>

<https://open.kattis.com/problems/hitting-targets>

<https://open.kattis.com/problems/goat-rope>

<https://open.kattis.com/problems/segment-distance>

<https://open.kattis.com/problems/hurricane-danger>

<https://open.kattis.com/problems/yikes>

<https://open.kattis.com/problems/undetected>

<https://open.kattis.com/problems/unusual-darts>

Project Problem Suggestions – Brute Force

Kattis

<https://open.kattis.com/problems/aldursrodun>

<https://open.kattis.com/problems/dreamer>

<https://open.kattis.com/problems/anttyping>

<https://open.kattis.com/problems/dancerecital>

<https://open.kattis.com/problems/dobra>

<https://open.kattis.com/problems/fruitbaskets>

<https://open.kattis.com/problems/sudoku>

USACO

<https://usaco.org/index.php?page=viewproblem2&cpid=1135> (Do You Know Your ABCs, Silver
April 2021)

<https://usaco.org/index.php?page=viewproblem2&cpid=1205> (Blocks, Bronze February 2022)

<https://usaco.org/index.php?page=viewproblem2&cpid=1207> (Robot Instructions, Silver,
February 2022)

<https://usaco.org/index.php?page=viewproblem2&cpid=1276> (Air Cownditioning II, Bronze,
January 2023)

<https://usaco.org/index.php?page=viewproblem2&cpid=690> (Cow Dance Show, Silver, January
2017)

Project Problem Suggestions – Binary Search

Kattis

<https://open.kattis.com/problems/freeweights>

<https://open.kattis.com/problems/hindex> (can be solved directly w/o binary search)

<https://open.kattis.com/problems/suspensionbridges>

<https://open.kattis.com/problems/expandingrods>

<https://open.kattis.com/problems/carefulascent>

<https://open.kattis.com/problems/monk>

<https://open.kattis.com/problems/reconnaissance> (ternary search)

<https://open.kattis.com/problems/zipline>

USACO

<https://usaco.org/index.php?page=viewproblem2&cpid=1136> (Acowdemia, Silver April 2021)

<https://usaco.org/index.php?page=viewproblem2&cpid=1229> (Alchemy, Bronze March 2022)

<https://usaco.org/index.php?page=viewproblem2&cpid=1397> (Maximizing Productivity, Bronze, February 2024)

Project Problem Suggestions – Dynamic Programming

Kattis

<https://open.kattis.com/problems/rijeci>
<https://open.kattis.com/problems/alphabet>
<https://open.kattis.com/problems/knapsack>
<https://open.kattis.com/problems/homework>
<https://open.kattis.com/problems/narrowartgallery>
<https://open.kattis.com/problems/spiderman>
<https://open.kattis.com/problems/tight>
<https://open.kattis.com/problems/nikola>
<https://open.kattis.com/problems/keyboardconcert>
<https://open.kattis.com/problems/drivinglanes>

USACO

<https://usaco.org/index.php?page=viewproblem2&cpid=863> (Teamwork, Gold December 2018)

<https://usaco.org/index.php?page=viewproblem2&cpid=945> (Snakes, Gold March 2019)

Project Problem Suggestions – Binary Index Tree

Kattis

<https://open.kattis.com/problems/fenwick>

<https://open.kattis.com/problems/supercomputer>

<https://open.kattis.com/problems/bread>

<https://open.kattis.com/problems/juggler>

<https://open.kattis.com/problems/megainversions>

<https://open.kattis.com/problems/turbo>

<https://open.kattis.com/problems/justforsidekicks>

USACO

<https://usaco.org/index.php?page=viewproblem2&cpid=898> (Sleepy Cow Sorting, Gold January 2019)

<https://usaco.org/index.php?page=viewproblem2&cpid=1041> (Haircut, Gold March 2020)