## Page Practice Problem List - By Lecture Topic

| Problems Pages (Practices)                    |
|---|
| Pair Up USACO Silver March 2017               |
| Load Balancing USACO Silver Feb 2016          |
| Polling (old SER)                             |
| Sorting Student Presentations (HS 2008)       |
| Diamond Collector USACO Silver Apr 2016       |
| Summing to Sevens USACO Silver Jan 2016       |
| Duel  |
| Bodies of Water SIUCF 2017 Contest 3 Pages    |
| Switching on the Lights USACO Silver Dec 2015 |
| UG Cables                                     |
| Degrees of Separation                         |
| USACO Fine Dining (Dec 2018)                  |
| USACO Directory Traversal (Feb 2018)          |
| Spreading News                                |
| TreeSales (Mercer 2014)                       |
| Cow Dance Show - USACO Jan 17 Silver          |
| Angry Cows (Gold Jan 16)                      |
| Queen Dido's Challenge Mercer 2014            |
| Count Sequences - COP 4516 DP 1 Contest       |
| Radio Contact USACO Gold Jan 2016             |
| Taming the Herd USACO Gold Feb 2018           |
| Visiting Relatives - UCF Practice Problem     |
| You Win - SER 2013                            |
|   |

## **Squire Practice Problem List - By Lecture Topic**

| Squires                    | Problems Squires (Practices)                |
|----------------------------|---|
| Binary Index Tree          | Balanced Photo USACO Jan 2017 Gold          |
|                            | Rotating Cards UCF Locals 2017              |
|                            | At Least Average (FHSPS 2017)               |
|                            | Bread Sorting (NCPC 2012)                   |
|                            | ZigZag2 (SI@UCF 2015)                       |
| Segment Trees              | USACO Counting Haybales                     |
|                            | Sneetches                                   |
| Hashing                    | USACO Censor (Silver, Gold) - Feb 2015      |
|                            | The Big Painting (SWERC 2014)               |
| Suffix Array               | Patience (COCI 2009-10 Contest 2)           |
|                            | USACO Standing out from the Herd (Dec 2017) |
| Fast Matrix Expo           | Knights (SER 2014)                          |
|                            | USACO Cow Basic (Mar 2017)                  |
| DFS Lowlink, BCC           | USACO Push-A-Box (Dec 2017)                 |
|                            | Black Cactus (UCF Locals 2011)              |
| 2-SAT, SCC                 | Illumination                                |
|                            | Kindergarten                                |
| Trees                      | Grass Cownoisseur Jan 2015                  |
|                            | Tourists 2016 NAIPC                         |
|                            | New Barns Feb 2018                          |
|                            | Disruption Mar 2018                         |
| DP                         | USACO Lifeguards (Dec 2016)                 |
|                            | USACO Sort it Out (Dec 2018)                |
|                            | USACO Redistricting (Jan 2019)              |
| Probability/Expected Value | USACO Cow Dating (Feb 2019)                 |
|                            | Uncertainty of Politics                     |
| Geometry                   | Taxable Area (COP 4516 2016)                |
|                            | USACO Balance Beam (Dec 2018)               |
|                            | Pool Table (SER 2009)                       |
|                            | Equal Angles (SER 2010)                     |
|                            | Stained Carpet (SER 2014)                   |