# THE Quest of the MCM on n M on n Mod n B, n y c B, d y n n

# Contents

1	What is the MCM?	2
2	A Strong Paper	4
3	A Strong Team	9
4	A Strong Timeline	12
5	Searching for the Optimal Solution	16
6	Common Failures to Avoid	19
7	Closing Remarks	20
Α	2006 Questions	20

# 1 What is the MCM?

n. MM., pon. . n bop.od o

verse verse verdenden dnor er se By ern i se se

- CCTC . C. n.
- ono Mn on
- M , 0, 0 ~

### **Contest Rules & Logistics**

Yo, ..., do, con, y, y, y, y, nc, con, r, n, yo y no. dd o, c.n., , o, yo y, o, n c, yA, y, o, o, o, non, r, d n, d n, y, on o, o, non.

The set of the set of

# • • •

Other than the control number, the paper must in no way identify the students, the advisor, or the school.

الم م d \_ d con جرب بج www.comap.com/undergraduate/contests/mcm/instructions.php

<sup>&</sup>lt;sup>†</sup>. , , c n. ~ , , o . . c . , c n. ~ , y, o y , o y , o y ,

## History

···· n > yo oo do Bo d ··· > ... on · > .o y n .. M M

2000 onor Mnon Bron v non n

#### **Background Research**

n vo da "n n o o vy v n y n od c v dy o o nd conconn n n n n n o dv o cn o o o o "n n n d n c y o d d n " dv v v A o h y /B. do nd on y nd o n on A . c An y o n . /n n nd d .y Modv c

### **Stylistic Considerations**

(x + co + c) = 0 (x + c) =

A on nd do y yo yo n n c.c.y... n c.c.y... don. or y n how A Novel Approach to... r. don. or y o dn. n.on. ddn. on nn.

A o nyon  $\neg$  n d c o n o  $\downarrow$  n n  $\neg$  n  $\downarrow$  n  $\neg$  n  $\neg$ 

Sectiona 6 02 6 00 7 0 19 1 E. JI & Ra 7. 1 10 10 10 99 0 F 9 6 20 0 2 9 25 7 9 5 . 5 2 Trike 28. 0 8 10 74 99 6 19 74 6 4 10 10 10 99 0 8 5 6 1

#### Programming

n ny M M.  $\lambda$  , won. where  $\lambda$  is a construction of  $\lambda$  is construction of  $\lambda$  is a constructio

Numerical algorithms. Bo con = n, n = c  $o_{x} = v$   $o_{x}$  n = n, n = n $o_{x} = 0$ ,  $o_{x} = 0$ , n = 0, n

Debug. n cod n y no  $\neg$  n cod no o  $\neg$  d o  $\neg$  d y yo o n n on n  $\neg$   $\neg$   $\neg$  n  $\neg$  n  $\neg$   $\neg$  n  $\neg$   $\neg$  n  $\neg$   $\neg$   $\neg$  n n n d  $\neg$  c  $\circ$  n n o o o c  $\circ$  c  $\neg$  c d y yo y o  $\neg$  co $\circ$  c  $\neg$   $\neg$  no c  $\circ$   $\neg$  c nc  $\circ$  y

#### Writing

יא האיד con n .o באצא להאידי ב .. ח on אדי ח א באס אין א nd א אר א הין dy con אר. אין א .א היא סיר אין א האר מאר אין א היא oon אר מאר אין א היא on א d n. אד א בא

, cond BX x x x x x x od cn o x on y c n c n x c y n . . . . o M c & o . . o d B X nd x . . o n n y n dd . o n o

 $q \rightarrow \neg \neg \circ \circ \circ \circ \circ \cdots \rightarrow n d c \circ \neg \gamma$   $n \rightarrow \neg n d c \circ \neg \gamma$ 

Citations.

e e e con e la contra de la con

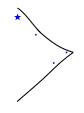
Mor. o. n. y ~ yo ~ . . y nd y ~ . d o ~ . . . y d y

## Thursday: The Contest Starts

 er e onder conder co

Monday:

## Random Ascent Hill Climb



## 6 Common Failures to Avoid

• • • • • • • n.dc • • d • ! n. • cdn • c.on • n.dd.op. c.on • • . • • oon • • • • •

Avoid arbitrary or unnecessary assumptions. o no. 0 - y = y = y = 0 or 0 - y = y = 0 or 0 - y = 0

•y

# 7 Closing Remarks

· M Mr o.o. n. r no o. n.y.o. n c. y

BLMB, Accor A, Or

no , , , , on , , , , , , , n d o y , o , , o , nd c , o n, y, , , c, , o c n o d, n, , n , , , c n, c y d c o , o , o , o , o , y o d, n, , , n, no, , y, , n, n c n, , n, , no, , , , o , o d c, nd n, co, , o, e o , o, , , n, n c n, , n, , n d nc c c , , , n, , , , , , , no, nco on o, c no, c n, , n , , , , , , , , , , , , , o, o nd n.

Annen nd. cont. n. the solution of the second of the secon

## References

B, A, M, nd oo o c n c , n M, M, n MLN, y, d.o. MM www.carroll.edu/~kcline/mcm.html ABL AX AN AN O O O O Y N N A Y http://www.gamasutra.com/features/20051026/gabler\_01.shtml BALY, BLAN, MANN, Ano, on contraction and n. . , n x .y co . n) ) ) BALX, BILAN, MANNANO, Oncourter, C.O.C. , n x y co . n ) ) A B NAN N C An Y B 00 0 $A \rightarrow L_B$ ,  $n c q \rightarrow m q c q z o n n d c n n n Add on y y$ A. N. Condananna y, ncnca Lo a qo , n 🔉 🗴 L c. 🔊 🍌 n nd \_ c NN YAN, B A, C z on oc n, on N, N,  $O_{1}$ a b b b b c nc b d Ann n c nc d Ann n c nc bMAX, LL  $\sim$   $L \sim \rho L d \sim N \sim 0$  n ANLAN, MAA M. od o Fnc. on Mn z. on o 6.