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T1 _____
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Team Control Number

65814

Problem Chosen

C

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2017

**MCM/ICM
Summary Sheet**

(Your team's summary should be included as the first page of your electronic submission.)

Type a summary of your results on this page. Do not include the name of your school, advisor, or team members on this page.

In order to see how autonomous vehicles affect traffic throughput, we wrote a program which simulates individual drivers on a stretch of highway. We tuned the parameters with models from real-world data sets in rush hour conditions (such as velocity, throughput, density, number of lanes, and speed limit).

Our software showed a modest improvement provided by autonomous vehicles when we tried a small number of vehicles. But when we scaled up the input to our desired parameters the program's performance did not scale well enough to be practical to use on large scale.

More research needs to be done in order to find conclusive results.