**USC Essay Ravi**

*At USC Viterbi, we endeavor to engineer a better world for all humanity. This vision goes hand-in-hand with the objectives of the National Academy of Engineering (NAE) and their 14 Grand Challenges. Engineers and Computer Scientists are challenged to solve these problems in order to improve life on the planet. Learn more about the NAE Grand Challenges at* [*http://engineeringchallenges.org*](http://engineeringchallenges.org/) *and tell us which challenge is most important to you, and why. (250-word limit)*

But let’s not forget one thing: tThe setting of the densely populated capital of Coruscant, as seen in *Star Wars: Attack of The Clones*, reminds me of my home capital Jakarta. What is unimaginable, however, is the scene of hovering shuttle buses, speeding cloud cars or .flying air speeders.

Despite efforts on integrating Greater Jakarta’s commuting transport options, or even the arguably successful market penetration of ride-hailing apps, overpopulation is a pressing issue that neither solutions are able to solve – at least not in the short run. Studies project that global population will grow to at least 8 – 10 billion by 2040 – 2050, and the exponential demand for residential housing and job opportunities is inevitably poised to burden existing infrastructural systems, especially in metropolitan cities.

This is especially true in Jakarta: over 10 million people face extreme levels of pollution and traffic on a daily and flooding on a yearly basis. As local residents alike breathe in this unhealthy lifestyle, I believe that the Grand Challenge *Restore and Improve Urban Infrastructure* must be solved as it would infiltrate higher levels of the Maslow’s hierarchy.

To build a proper city, an engineer must focus on empowering sustainability – a concept requiring innovation and the capitalization of the latest technological advancements such that infrastructure growth could be accelerated and cities’ carbon footprint lessened. As we explore the realm of clean sources of energy such as wind and solar farms, I hope to collaborate with my fellow engineers as we create and nurture future Coruscants, if not even better.

*Hi Ravi,*

*Good job! I think you managed to briefly answer the “why” to your choice of Challenge in a nutshell, which would’ve been nice to expand should the word limit be higher.*

*At any rate, keep up the good work!*

*- Matthew*