How did you discover your intellectual and academic interests, and how will you explore them at the University of Pennsylvania? Please respond considering the specific undergraduate school you have selected. (300-450 words)

*20 minutes. That’s a 99.3% success rate.*

I’d track my commute times to school, constructing a probability graph to maximize extra sleep without being late. I tested it out.

*I shouldn’t be late. Wait – I didn’t account for the exponential rate at which the infamous Jakarta traffic grew.*

I was late that day.

I revised the model, this time measuring traffic variability. From inserting dummy variables to capture the effect of Monday blues and Friday highs to computing the beta for my newly-added variable *rainy season*, I was fascinated with how – from motion to fluids – the relationship between variables could be synthesized into something meaningful.

Growing up, Dad’s gout and diabetes have accentuated in me the importance of medication. Jaw dropped by his bills’ figures, I scoured the web trying to comprehend the rationale behind the astronomical costs of treatment in Indonesia.

The practically integrated SEAS curriculum would further my goal to make treatments, as one my Dad has, more accessible through the different facets of chemical and biomolecular engineering. Engaging with industry professionals through Product and Process Design would grind me for the technical know-hows, while Engineering Negotiation would sharpen my persuasion skills crucial to initiating my dream venture. Having found out the fat mark-up imported duties make of patented medications and chemical feedstocks, reading Global Supply Chain Management at Wharton would equip me with dynamic procurement strategies critical to navigating the challengingly vast Indonesian archipelago.

Watching magnesium combust into a blinding white flame stunned me, but explaining it in terms of energy loss boggled me, for which thought process the Pharmaceutics and Biotechnology concentration would let me relive. Applying those techniques to understand biological systems, I hope to collaborate with the likes of Professor Scott Diamond whose work on the computational modeling of blood clots enhances treatment designs for strokes that diabetics like Dad are especially prone to.

Debating International Space Station funding at Harvard Model Congress acquainted me with the iterative approach to research. At Penn, I also intend to explore my interest in public policy. Since sourcing for medications domestically could potentially reduce costs while empowering local labor, I’d take Consumers, Firms and Markets in Developing Countries to gain insights into constructing policies that will incentivize corporations to buttress Indonesia’s lack of research.

I am keen on Penn’s flexible, cross-disciplinary curriculum that will cater to my holistic learning curve. Professor Damon Centola’s “Network Dynamics of Social Behavior” on Coursera, for instance, introduced me to mathematically model society, a topic I intend to further explore at the Warren Center for Network and Data Sciences under a social sciences framework to effectively communicate the importance of having an empirical mindset even for the most trivial of matters.

*Hi Harvani!*

*As always, good job with content development. The plethora of activities you plan to do at Penn will hopefully translate – in the admissions committee’s eyes – to the ambition and drive I could see from your piece. Wishing you the best of luck for your application!*

*- Matthew*