1732FC6F2FA8851B	Title	Matriculation
C69651488A603F4B	Subtitle	Accepting a PhD program
24EFE08264888DD2	Author	Recursion Ninja
49B9FE409A9C96DE	Date	12022+076 Thursday, March 17
2048DEC4F292E284	Word Count	803 (ERT 4 min)
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It is with great pleasure I make the following announcement. Today I have accepted an admission offer into the Computer Science - PhD program beginning in the Fall 2022 semester at The Graduate School and University Center of the City University of New York (GC - CUNY). Furthermore, I have been selected to receive, and have also accepted, a Graduate Center Fellowship. The Graduate Center Fellowships provide students with a tuition award and an academic stipend each year for the first five years of study. I am incredibly honored and excited to begin this next chapter of my career.

During the remainder of the Spring 2022 semester, I will be both finalizing my Masters thesis and then completing in my thesis defense. At the end of the Summer 2022 term, I will graduate from Hunter College with my Masters in Computer Science. I have found my studies and research so far to be challenging yet rewarding. The academic guidance of my Masters advisor, Professor Subash Shankar, has been instrumental in my imminent Masters program graduation and subsequent PhD program enrollment. This positive relationship will continue during my PhD program, as Dr. Subash will be (one of) my PhD advisors.

After concluding my Masters thesis, which illustrates an application of formal methods in cryptography, my PhD studies will take a slightly different direction. My proposed area of inquiry for my PhD remains in the general domain of formal methods, but will instead explore the application of various program synthesis and automatic program repair techniques inter-operating within a linearly and dependently typed programming language. Specifically, I will be attempting to combine oracle-based, example-based, and type-directed program synthesis techniques, creating a program writing tool which requires minimal specification and work from the programmer while producing provably correct code. The test-bed for this research will be the Quantitative Type Theory system and it's implementation in Idris 2. I hope that the end result of my PhD research will be a notable improvement in the Idris 2 language's program synthesis tool-chain.

Over the summer of 2022, I will be conducting literature review and performing exploratory tests, in preparation for my PhD program. Additionally, I will be searching for additional grant funding sources which overlap with my area of research. The goal of these two summertime undertakings is to produce multiple strong grant applications in early fall 2022 and receive grant funding approval by the start of 2023.