

Statement of Intent

I have been, am, and shall always be a student of science and life. I can add that I am now a teacher of these disciplines as well. The drive to understand complex, multifaceted problems will always lead me to ask questions until I have answers. I worked on an intractable problem for a considerable amount of time, before gaining understanding the nature of P vs. NP.

I initially started programming at Oregon Institute of Technology where I achieved my degree in software engineering. Then for the next nine years, I built a POS driver that is used worldwide in countless businesses. Despite the pervasiveness of its use, I wish to give the world a better gift than quicker store checkout times. Using the skills and principles of industrial standards, specifications and testing, I will teach students essential skills for software development. I am now seeking training in rigorous research practices and honing my skills as a teacher and communicator.

As the energy consumption per capita is rising; the best commercial rechargeable batteries are 100:1 the energy density of gasoline. Increasing battery efficiency is still an unsolved and urgent issue of this current environmental climate. Any solution via programming to this problem domain has specific constraints originating from physical chemistry. In seeking to specialize in these disciplines, my ultimate goal is an energy dense battery found using computer simulation, AI search, and chemical testing.

Independently, I have been diligently building models, equation balancers, and validation logistics, etc. to understand battery electro chemistry I am seeking the opportunity to demonstrate that I have the capability and drive to work in a research laboratory. By instructing students in programming, I also hope to gain knowledge from their varied perspectives and increase the success of this complex quandary. While there are hard problems and students to teach, I will serve them to the best of my abilities.

Sincerely,

Roscoe Secondo Casita

Eagle Scout, Software Engineer III, pending M.S. CS*