

Pranay Rajpaul

### Quantitative Engineer

The career I have chosen is a quantitative engineer, very similar to the widely known career of computer hardware engineer. This career matches many of my traits as it is a job that requires computer literacy, organizational skills, mathematical reasoning, and leadership skills. It is also a perfect fit for enterprising and investigative people as it requires a lot of logical reasoning and problem solving. As a hardware project coordinator for the school's robotics team, I have a lot of experience on the technical end of devices and have experience working in the field of quantitative engineering.

A computer hardware engineer has multiple jobs in a company: they design computer systems, create electronic components needed for the device manufacture any component needed for the computer, research physical, life, and engineering related fields, and control manufacturing instruments. A Quantitative Developer develops these traits into a financial environment. They mainly research, design, develop, and test computer systems, processors, circuit boards, memory devices, networks, and routers. They are the sole reason quantitative analysts, front office ones, are able to work with clients using their own technology. Computer hardware engineers are part of a bigger group of information technology workers. As a whole, information technology is a group that is responsible for all of the technology advances our world has experienced. An average developer works full time, around 70 hours a week, by collaborating with a team to solve a problems experienced with the creation new technology. As technology continues to advance, the demand for more engineers/developers grows. The national median salary is \$115,000 with the lower 10% making \$70,000 and the upper 10% making

\$180,000; the average salary in San Jose is \$135,000, being the highest paying American city.

To become a quantitative developer you need to obtain at least a bachelor's degree in computer engineering, electrical engineering, computer science, or any other technology studies. After this, you can become an quantitative developer and work your way up to becoming a front office developer.

I will apply for University of California, San Diego, University of Illinois, Purdue University, Carnegie Mellon University as they have prestigious engineering departments. It is better to go to a regular university, not a trade school, as universities have big engineering departments that contain multiple areas of study. I will get a Bachelor's degree in Computer Engineering and Electrical Engineering as they are majors most “big companies”, like Apple and Google, require. It is not mandatory to work as an intern but, working as one could secure a starting job, right after college. In addition, this will also help gain reputation in that company, making it easier to achieve higher ranks in the company. Although not required, getting a graduates or doctorate degree will help as you gain a deeper understanding of hardware engineering and will boost your work production.

Becoming a quantitative analyst will make me happy as I am interested in engineering, it has a good pay, and it opens the door to try different careers in technology as well. I will be working with a team to solve issues and problems, or even create the next generation of technology. It's really interesting to me that I could be a part of the future of technology, and possibly change everyone's daily lives. The six-figure salary will allow me to enjoy life as I will have money to spend on relaxation and family time. With hours on weekdays, I have the weekends off to spend my day doing whatever I want. By being a developer, I will be able with

work on unique financial situations, and be able to innovate solutions to them. In addition, I will be able to work with a group and travel around the world. Although at times there could be problems we might spend hours and still not know how to fix, and sometimes annoying group members, becoming a quant for a top tier company would surely make me happy.

Work Cited

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