

Statement of Purpose

Dear Sir/Madam,

I am writing to express my interest in the summer internship program at [University Name]. As a senior Computer Science student at the University of Tehran, I am passionate about Theory and validation using mathematical logic, automata theory, and also using computer science and data science in finance. I have found the work of the teachers at [University Name] to be particularly interesting, and I believe that I can expand my knowledge and teamwork skills if I pass this excellent internship program.

My academic qualifications and achievements include a GPA of 18.92 out of 20, ranking 3rd amongst 60 students in my class. I have also tried to become strong in communication and teamwork by volunteering to become a teacher assistant of courses and teachers which I think can help me expand my knowledge and skills and challenge me in this way. Last summer, I enrolled in online courses related to data science, machine learning, and deep learning and their usage in economics and finance including econometrics and time series analysis, to learn more in these fields. After I completed them, I started doing research with my favorite professor, Dr. Abdollah Safari. Our research is about finding interaction between variables, using decision trees. First, we tried to find interactions using random forest, which each tree tries to find if there is interaction between 2 variables. But it didn't work in practice. So we have used a single tree; It has poor results so we are trying to find a way to make the result better. I will generate a Python package that makes this method to find interaction between variables since there is no such package in any famous programming language. I also enrolled in a finance course of the University of Tehran, to merge my basic knowledge in computer science with finance and have the ability to think and work Interdisciplinary.

I believe that my relevant skills and experience make me a suitable candidate for the internship. My basic knowledge in the courses that I have passed with top marks like data structure, game theory, mathematical logic, computation theory, advanced programming (C++), econometrics, and so on, keeping an eye on my enthusiasm in all the courses that I am enrolling in this semester such as algorithm design, operating system, artificial intelligence, and finance, and regarding my acquaintance with academic research environment, I am confident that I can contribute to the research projects at [University Name].

My long-term career goal is to become a researcher in the field of theoretical computer science and finance. I believe that this internship will provide me with the opportunity to learn from experienced researchers and gain hands-on experience in research projects. I am confident that this internship will help me achieve my career goals and contribute to the research community.

In conclusion, I am excited about the opportunity to apply for the summer internship program at [University Name]. I am confident that my academic qualifications, relevant skills, and experience make me a suitable candidate for the internship. Thank you for considering my application.

Sincerely,

Amirabbas Rezasoltani

