IDEAS Fellowship Proposal

The purpose of this Fellowship Program provided by International Data Engineering and Science Association (IDEAS) is to help students during their transition from an academic environment to a working environment. In essence, our goal is to bridge the gap between academia and industry. Data Science is currently a relatively new field, and as such students sometimes graduate with insufficient experience in this field. In order to prepare graduates in achieving their goals we have split this Fellowship into three main phases: Mentor Consulting, Project Training Program, and an Internship Training Program.

The first part of the Fellowship program will consist of the Mentor Consulting phase. There will be four mentors. This part will last 8 weeks and will be split into two parts, each consisting of 4 weeks. Students will have weekly meetings with one of the with domain experts in their fields, a technology interview with a data scientist, self-learning guidance from a data scientist, career development coaching from hire-managers, and a chance to develop their professional network. The main topic of this phase will be "How to become a Data Scientist," "How to study Data Science," and "How to get an interview and succeed in it." During the first 4 weeks, each mentor will choose a popular topic/current trend to discuss during their weekly meeting which is

related to the data science field to help students understand how to become a data scientist. Some topic examples can be:

- What is Data Science and what are its future trends?

- How to self-study Data Science?

- What positions are available in Data Science?

- Data Science Project Life-Cycle

- How to get an interview and succeed in it?

The second part of the Mentor Consulting Program will last 4 weeks. During this part mentors can resolve any impending questions students might have from the material they presented or any questions. This will also be a perfect opportunity for mentors to receive feedback from the students.
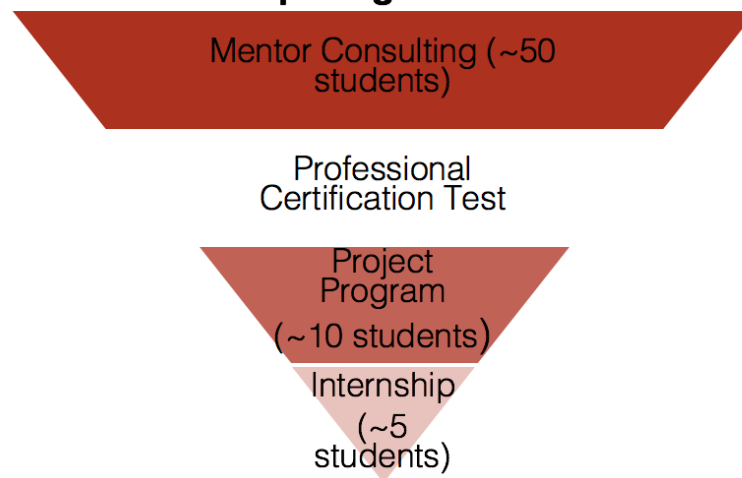
Before students can move on to the project program, we plan to give them 2-3 exams and allow mentors to interview the students before they proceed. If the students qualify, we will offer them a certificate (valued at $500 per each) free of charge. After they obtain their certificate they will be interviewed by a mentor. If they perform well on the interview we will let them continue on to the project program.

The second part of the program consists of the Project Training Program. This part of the program will last 8 weeks. During this time students will have 2-3 meetings with domain experts that will be leading the students and helping them train their skills in order for them to be able to complete their project. Some project related topics include FinTech, Healthcare, E-Commerce, and Big Data. Training the students skills will help them for the next phase.

The last part of the program consists of the Internship Training Program. This will consist of an onsite internship in one of the following fields: FinTech, Healthcare, E-Commerce, Recommendation system, or Supply Chain. The students will continue to meet with the mentors, project managers, and other engineering team members in the real world project. The duration of the internship phase of the program will last approximately two or more months. At the end of the fellowship program, IDEAS will refer qualifying students to full-time jobs.

Mentorship Program Flow Chart

Mentor Consulting (~50 students)

Professional Certification Test

Project Program (~10 students)

Internship (~5 students)

In conclusion, this is a great opportunity for students to get mentoring from leading experts in their fields, as well as hands-on experience, that will help them get closer to their goal of becoming a data scientist. It is also an excellent opportunity for mentors to talk about their field, train students, and get a potential future employee that will help out their company.