



# IDEAS Data Scientist Fellowship

## 1. Introduction of IDEAS

International Data Engineering and Science Association (IDEAS) bridges the gap between academia and the industry. We build a data engineering and science hub by providing robust resources and connecting real-world expertise together from business leaders, professionals, and promising students. Our vision is to foster the data engineering and data science ecosystems and broaden the adoption of their underlying technologies. We empower and nurture community growth by offering online resources, conferences, latest industry trends and data related job opportunities.

Learn more information: [www.joinideas.org](http://www.joinideas.org)

## 2. IDEAS Data Scientist Fellowship Program

The purpose of this Fellowship Program provided is to help students and young professionals during their transition from an academic environment to 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 four main phases: Mentor Consulting, Certification Test, Project Training, and Job Referral.



## 1) Mentor Consulting

The first part of the Fellowship program will consist of the Mentor Consulting phase. This part will last 6 weeks. Students will have weekly workshops with one of the domain experts in their fields. The syllabus of mentor consulting is as follows.

<b>Time and Topic</b>	<b>Lecture</b>
Week 1: Data Science Overview	What is Data Science and what are its future trends? What positions are available in Data Science? How to study Data Science? How to get an interview and succeed in it?
Week 2: Probability/Statistics	Basic knowledge of probability and statistics
Week 3: Machine Learning	Supervised machine learning algorithm (linear regression, logistic regression, SVM, decision tree, etc.)
Week 4: Machine Learning	Unsupervised machine learning algorithm and evaluation method
Week 5: Data Processing	Data science project life-cycle and its application
Week 6: Python ecosystem	Frequent-used python library for data analysis (e.g. numpy, pandas, sklearn) and case study



## 2) Certification Test

Before students can move on to the project program, we plan to give them 2-3 exams (SQL/Python/Probability) 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 to the project program.

## 3) Project Training

The second part of the program consists of the Project Training Program. This part of the program will last 6 weeks. During this time students will have weekly 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 skill of the students will help them for the next phase.

#### **4) Job Referral**

The last part of the program is the Job Referral Program. This will consist of an onsite internship or a full-time job 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.

### **3. Student achievements from this fellowship program**

This is a great opportunity for students to get mentoring from leading industry experts in their fields, as well as hands-on experience, that will help them get closer to their goal of becoming a data scientist.

#### **4. How to apply**

- 1) Send your resume to [fellowship@ideassn.org](mailto:fellowship@ideassn.org)
- 2) Online assessment
- 3) Confirmation