# Headstart Silicon Valley Data and Real-world Summer Internship Program 2019

Headstart Silicon Valley, Inc.



### **Why This Program**

Headstart Silicon Valley offers data and real summer internship programs.

We provide students around the world with a 4-week project-based data science internship program in Silicon Valley, USA.

With interdisciplinary training on data analysis and visualization, global students explore professional project experiences and meet mentors who are working as data scientist in the companies.



### Course Structure and Highlights



Accelerate your academic, career, and personal growth in 4 weeks.

### **Testimony and Outcomes**

### Gyu Su Han, University Sogang '2018, 1<sup>St</sup> Place – Samsung Data Challenge 2018

"The best part of this program was the mentoring. We were able to learn data analysis techniques used in the industry. It was especially helpful to learn tips on how to deal with issues that arose in our projects"





## Hyun Soo Shin, University Sogang '2017, Data Science Engineer, NAVER in Korea

"I appreciate the Headstart Silicon Valley's class design that emphasizes on quantitative analysis, and I would say it was one of the most intense experiences of my life, and important to build a strong portfolio of projects, and my projects at Headstart Silicon Valley definitely helped me in getting that first job."



### **Professional Skill Development**

Introduction to Data Science

Machine Learning and Deep
Learning Principle

Statistical Foundations for Data Science

Data Visualization with D3.js



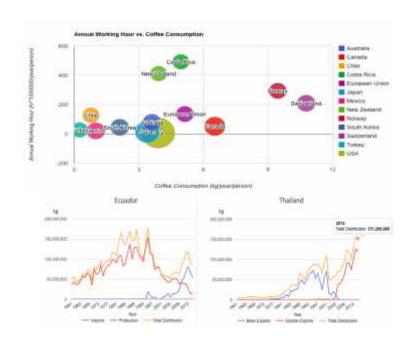
**Advanced Analytics** 

### **Curriculum and Contents**

- 01 | Data Science Introduction, Preferences, R Basic
- 02 | Coding style, data processing using dplyr and data visualization using ggplot2
- 03 | Statistical concept formulation and practice
- 04 | Analysis technology according to acquisition data type
- 05 | Big Data Type Classification and Analysis I: Basic Principles and Conceptual & Logical Modeling Implementation
- 06 | Big Data Type Classification and Analysis II: Understanding Lasso Basics & Random Forrest
- 07 | Prediction through Big Data Analysis I: Forest Data Analysis
- 08 | Prediction through Big Data Analysis II: Bicycle Rental Demand Analysis
- 09 | Prediction through Big Data Analysis III: Analysis of online ad click tendency data
- 10 | Atypical and spatial data analysis and learning through various examples





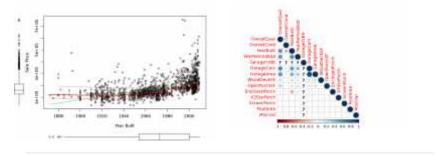


### **Data Storytelling Project**

Lorem ipsum dolor sit

# Real-World Data Science Project

Analysis real estate data and define what influences the value of a house and make the prediction model.



# **Environmental Data Monitoring Project**

Generate data from the IoT sensors and monitor overall operation.

# Technical Skills & Knowledge of Data Science

- Statistics (statistics foundation for Machine Learning)
- Machine learning tools and related technologies
- R, Python, SQL
- Data visualization and reporting technology
- Coding techniques and exercises (data science-optimized projects)



Our renowned senior data scientists bring deep industry experience directly to college students who want to gain more than their knowledge.

The diverse work experience in the industry is embedded in the projects students are practicing and naturally meets the requirements of employment. The numbers below are evidence of our team's strong competitiveness.

**Number of Students from abroad** 

270

Total number of students, who attended our internship program from 2015

Internship in US & Jobs

**45** 

Number of Students who got jobs and internships after our program

**Schools and Partnership** 

**25** 

Number of University and Partnership Companies in US and Korea

#### **Overview**

- 4-week intensive course
- Data collection and visualization after analysis
- Implementing the Data Model
- Learning Silicon Valley IT companies' practical application cases
- Meet local human networks and workshops

### Schedule (July 28<sup>th</sup> ~ August 23<sup>rd</sup>, 2019)

Schedules & contents are subject to change

Mon	Thu	Wed	Thu	Fri
Day 1	Day 2	Day 3	Day 4	Day 5
•Arrival in SF (SFO) •Check in housing	Introduction of Company Program  Welcome event - Self Introduction Data Science - Lecture 1  Discussion	Team build- I Apple Campus Tour Team build- II	•Workonprojects •DataScience- Lecture2 & Discussion	Work on projects     SV Talk – Startup     Review project meeting by team
Day 8	Day 9	Day 10	Day 11	Day 12
Work on projects	Data Science - Lecture 3     & Discussion     Work on projects	Work on projects     Review project meeting     by team	Data Science - Lecture 4     & Discussion     Work on projects	Work on projects     Attend networking     events in SV
Day 15	Day 16	Day 17	Day 18	Day 19
Work on projects     Meetup – Netflix Sr. Data Engineer	Data Science - Lecture 5     & Discussion     Work on projects     Review project meeting	Work on projects     Google, Facebook, Stanfor d campus & Lab tour     Seminar at Stanford	Data Science - Lecture 6     & Discussion     Work on project     Meetup -Udemy, director     of Engineer	Work on projects     Hacker Dojo Lightning Talk     Social meeting in SV
Day 22	Day 23	Day 24	Day 25	Day 26
Work on projects     Review project meeting	Data Science - Lecture 7     & Discussion     Work on projects     Review projects     Story of Silicon Valley Kore an Engineers	Discussion, Q&A     Work on projects     SV Talk – Google engineer	Team Project Presentation     Public Presentation     in English	Closing team meeting and review Checking out and Dismiss

### **Cost & Detail**

#### Description

Data Science Summer Internship Program at Silicon Valley (\$6,500 per person)

Date: 07/28/2019 ~ 08/23/2019

#### **Program and Details:**

Professional Software Training with Data Science Projects

Furnished housing for the duration of the program

Facilities and office service

Lunch at office (Monday ~ Friday)

Presentation Event (8/17~ 8/18)

Social meeting and meal setup,

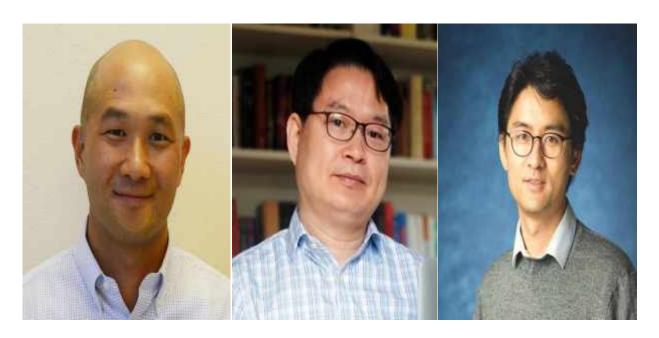
Dinner for Seminar

Management and Operation of Program

Mentoring & Visiting IT companies in

Silicon Valley

### **Team**



Ryan Koo, CEO

Jaimie Kwon, Sr. Data Scientist

Andrew Park
Big Data Software Engineer
LinkedIn

