2021년 하반기 「ICT학점연계프로젝트인턴십」 글로벌과정 참여 연수업체 현황

순번	연수업체	주요서비스 및 제품	직원수		희망 인턴수	실습수당(월) - 현지 인턴십 기준	지역	기타
			현지	한국				
1	B Garage	- 자율비행 드론(HW/SW) 및 클라우드 기반 소프트웨어 서비스 (Website : https://bgarage.ai)	7	1	1	$2,500(minimum)	San Jose	중식, 다과 제공
2	Bear Robotics.	- 식당 직원의 음식 서빙을 도와주는 실내 자율 주행 로봇, 페니 (Website : https://bearrobotics.ai)	47	42	6	$2,000	Redwood City	중식, 다과 제공
3	Enuma	- 교육 기술 : Todo Math, Todo English, Kitkit School, Enuma School (Website : https://enuma.com)	18	83	1	$2,000	Berkeley	
4	Laon People	- AI Vision 검사 솔루션 : NAVI - 트래픽 솔루션 : LAON TS (Website : https://laonpeople.com)	2	150	1	$2,000	San Jose	중식, 다과 제공
5	Pixelic	- 모든 SaaS 알림을 위한 - 통합 편지함 소프트웨어(Hyperinbox) (Website : http://hyperinbox.app)	2	3	1	$1,700	San Francisco	
6	XL8	- Deep Neural Network Technologies를 통한 기계번역 솔루션 서비스(Skrol) (Website : https://xl8.ai)	3	1	1	$2,700	San Jose	중식, 다과 제공

순번	연수업체	인턴 역할/분야	실습생 요구역량
1	B Garage	○ 자율주행 시스템 운영에 필요한 HW 및 SW 개발 및 테스트 ○ 데이터 분석을 위한 클라우드 기반 소프트웨어 개발	○ 좋은 프로그래밍 기술 ○ 팀 플레이어, 열정적이며 친절함, 학습이 빠른 실습생
2	Bear Robotics.	○ 소프트웨어 엔지니어 : 식당용 로봇에 사용하는 소프트웨어 구성 요소(앱, 클라우드 및 로봇) 개발 ○ 테스트 엔지니어 : 실험실 및 실제 환경에서 로봇 테스트 ○ 기계 공학 엔지니어 : SolidWorks를 사용한 기계 구성요소 디자인	○ 영어 의사소통 능력, 빠르고 능동적 학습, 식당 서비스 경험 가점, 팀 플레이어 ○ 소프트웨어 및 테스트 엔지니어 인턴 : 프로그래밍에 능숙 및 리눅스에 대한 이해(Python, C++ 혹은 Javascript) ○ 기계 공학 인턴 : SolidWorks에 능숙 등
3	Enuma	○ 당사의 교육 제품의 학습 데이터 분석 ○ 학생들이 학습하는 방법을 더 잘 이해할 수 있도록 지원 ○ 교육 콘텐츠의 품질 및 영향 평가 ○ 이해 관계자와 정기적으로 대화하여 조사 결과 제시 및 데이터 요구 사항 조사	○ SQL, Python 및 Jupyter Notebook에 대한 업무지식 필요(R은 선택사항) ○ 영어 작성능력 및 영어 대화능력 능숙
4	Laon People	○ AI 트래픽 솔루션 개발지원 ○ 미국 City 및 미국 주 DOT(교통국)와의 POC(Proof of Concept)	○ C++, Visual Studio Code, Windows, Pytorch, Tensorflow, Deep learning에 능숙
5	Pixelic	○ Hyperinbox 앱 개발 및 다른 SaaS 앱과의 통합 기능 개발	○ 웹 기반 소프트웨어 응용 프로그램 프로그래밍 경험 ○ 웹 기반 소프트웨어 제품에 대한 기본 지식 ○ 팀 단위 업무 능력 ○ 하나 이상의 고급 프로그래밍 언어 경험(Java, Javascript) ○ MVC 프레임워크 기반 프로그래밍 언어 사용 가능자 선호 (Ruby on Rails, Python)
6	XL8	○ 교육/검증 데이터 처리를 자동화 하기 위한 데이터 파이프라인 설계 및 구현	○ Python ○ Data Processing(Hadoop, Spark 등) ○ Apache Airflow(권장사항) ○ Streamlit.io(권장사항)

Internship Details – B Garage

1. Goals and Objectives

☞ Description of specific goals and objectives for this program

The goal is to support a team develop and test hardware and software required for autonomous systems in commercial environments and develop cloud-based applications for data analysis.

2. Working Conditions and Environment

a. Working Conditions

☞ Description of compensation and benefits for Interns

- Experience in advance technologies such as AI, computer vision, Robotics, and Drone
- Free lunch, snacks, and drinks
- Monthly salary starts from $2,500 and can be negotiable according to experience
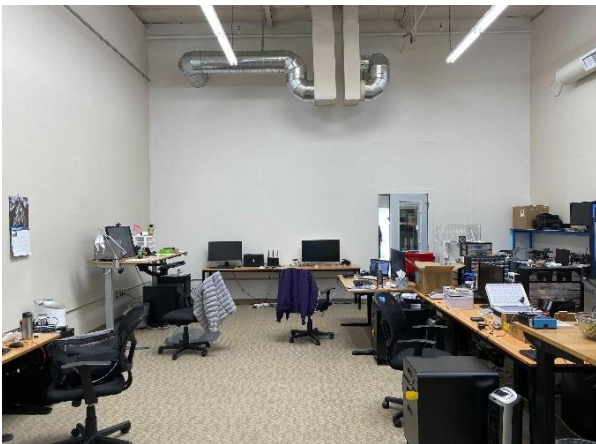
b. Working Environment

☞ Description of the site where Interns will work

- Located in San Jose, CA, USA
- Fast-paced and passionate
- Flexible and friendly

☞ Description of the Korea branch office where Interns will work for the time being(If applicable)

- Located in Seoul, Korea
- Fast-paced and passionate
- Flexible and friendly

c. Training Site Picture

U.S.A	Korea(if applicable)

3. Trainee's Roles and Responsibilities (in detail)

☞ Description of Interns' job description during the program

- Develop and test hardware and software required for building and operating autonomoussystems
- Develop cloud-based applications to analyze data

☞ What specific knowledge, skills, or techniques will be learned?

- Experience in an early-stage startup and ability to serve cross-functional roles
- Autonomous systems
  - o perception, stat estimation, planning, and control
  - o sensor fusion
- Computer vision
- Software development

4. Requirements for Position

☞ Which specific knowledge, skills, or techniques will be required to perform the tasks?

- Good programming skill
- Work as a team
- Passionate and friendly
- Fast learner

5. Methodology of Training

☞ Include specific tasks and activities and/or methodology of training.

- Interns will closely work with mentors.
- Interns will participate a weekly all-hands meeting.

6. Milestone

☞ Time schedule for the program

- TBD

Internship Details – Bear Robotics

1. Goals and Objectives
☞ Description of specific goals and objectives for this program

Interns will be exposed to the world top artificial intelligence software in robotics that leads Industry 4.0 in restaurant space. We expect interns to perform independently and actually contribute to the real product.

Specific goal for the interns:
- Write testing scripts for nightly testing
- Improve robot application code that restaurant employees' control
- Operate robot at the real restaurant environments
- Learn Google-style software development methodology

2. Working Conditions and Environment

a. Working Conditions
☞ Description of compensation and benefits for Interns

$2,000/month compensation. Free lunch every day. Free dinner and beer if you work in the evening. On-site micro-kitchen for drinks, fruits, snacks and coffee. Bike-friendly community. Free food and drinks while working at the restaurant.
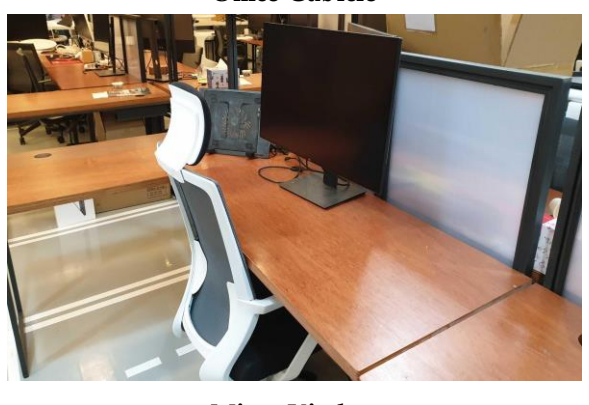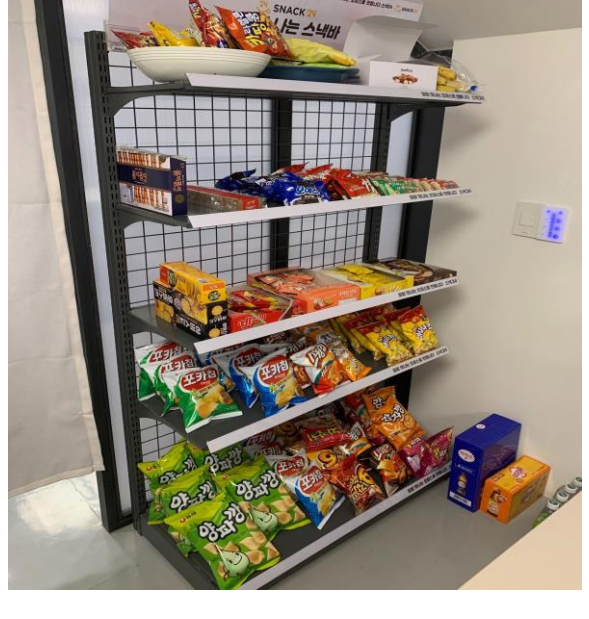
b. Working Environment
☞ Description of the site where Interns will work

Bear Robotics, Inc. office is located in Redwood City which is at the heart of Silicon Valley near Google, Facebook and Oracle. Our primary customer, Google and Amici's Pizza, is located in Mountain View, California. Interns will be provided with a dedicated desk and a laptop and other equipment as well.

☞ Description of the Korea branch office where Interns will work for the time being(If applicable)

Bear Robotics, Inc. office is located in Seongdong-gu, Seoul near Seoul Forest. It is conveniently located near subway stations Seoul Forest station (Bundang line) and Ttukseom station (Line 2, Green line). Interns will be provided with a dedicated desk and a laptop and other equipment as well.

c. Training Site Picture

U.S.A	Korea(if applicable)
Office Cubicle	**Office Cubicle**
Micro Kitchen	**Micro Kitchen**

3. Trainee's Roles and Responsibilities (in detail)
☞ Description of Interns' job description during the program

- Become familiar with ROS (Robot Operating System).
- Become familiar with 2-wheel robot hardware and its control.
- Become familiar with sensor input and processing the sensor data.
- Will learn how to do unit-testing for robots.
- Familiar with dealing with non-deterministic environments.

☞ What specific knowledge, skills, or techniques will be learned?

- Software & Test Eng Intern:
  - Writing robust and solid software
  - Automatic software testing, continuous build/integration
  - Dealing with source code version control, collaboration
- Mechanical Eng intern:
  - Designing and executing verification and reliability tests
  - Mechanical engineering and CAD best practices
  - Basic geometric dimensioning and tolerance (GD&T) for mechanicaldrawings
  - Vendor management and part quality control
- Working as a team and collaborating with other teams (Software, Hardware, Mechanical, Product, UX, QA, Field Ops, etc)
- Cooperating with other teams

4. Requirements for Position
☞ Which specific knowledge, skills, or techniques will be required to perform the tasks?

- Should be able to communicate in English.
- Software & Test Eng Intern:
  - Proficient in programming (Python, C++ or Javascript)
  - Understanding of Linux
- Mechanical Eng Intern:
  - Proficient in using SolidWorks.
- Must be a quick and proactive learner.
- Restaurant serving experience is a plus.
- Team player.

5. Methodology of Training

☞ Include specific tasks and activities and/or methodology of training.

Orientation and training will be performed by CTO, Director.
All internal information will be provided transparently, and the intern will work the same as the regular employees.

- ● Source repository
- ● Hardware and software design documents
- ● Internal wiki-page
- ● Customer lists
- ● Product milestones
- ● Test reports

We will train the intern through Google-style code review and integration testing.

6. Milestone

☞ Time schedule for the program

Orientation and training will be performed by CTO, and Director.
All internal information will be provided transparently, and the intern will work the same as the regular employees.

- ● Week 1 - Orientation of development environment
- ● Week 2 - Learn field operation and basic Robot Operating Systems, Write Objective and Key Results for the internship
- ● Week 3 ~ 16 - Design and implement assigned tasks
- ● Week 7 ~ 27 - Test in a real environment and improve the code.

Internship Details - Enuma

1. Goals and Objectives

☞ Description of specific goals and objectives for this program

How do children learn new math and reading skills? How do we identify moments of frustration and failure in a child's learning experience, and select the most effective intervention for leveling up her/his abilities?

Here at Enuma, best known for its children's app Todo Math and as a winner of the Global Learning XPRIZE competition, our team is busy trying to answer these and other similar questions about how children learn foundational math and literacy skills. We are working on new and interesting approaches for quantifying human behavior to develop the best self-directed learning solutions. Your work will help us to improve how our students learn, considering factors like the quality and structure of our content, parent and teacher engagement, and human cognition and development!

2. Working Conditions and Environment

a. Working Conditions

☞ Description of compensation and benefits for Interns

- Cross-functionally working with a world-class education technology team
- Mentored by a senior data/learning scientist (PhD)
- Monthly compensation of $2,000

b. Working Environment

☞ Description of the site where Interns will work

- Office located at 2600 9th St. Berkeley, CA, 94710
- Trainee will be provided with a dedicated work area and equipment if needed.
- Flexible, friendly, and professional working culture

☞ Description of the Korea branch office where Interns will work for the time being (If applicable)

- Office located at HeyGround G301, 5 Ttukseom-ro 1na-gil, Seongdong-gu, Seoul, Korea04779
- HeyGround building is a hub of social ventures
- Trainee will be provided with a dedicated work area and equipment if needed
- Flexible, friendly, and professional working culture

c. Training Site Picture

U.S.A	Korea(if applicable)

3. Trainee's Roles and Responsibilities (in detail)

☞ Description of Interns' job description during the program

- Analyze the learning data of the Company's education products
- Help our curriculum team better understand how our students learn
- Evaluate the quality and impact of our educational content
- Present the findings and survey the data needs by speaking with stakeholders regularly

☞ What specific knowledge, skills, or techniques will be learned?

- Insider insights on how a successful edtech company operates
- Professional data analysis skills to serve cross-functional stakeholders
- Strong presentation and communication skills in English

4. Requirements for Position

☞ Which specific knowledge, skills, or techniques will be required to perform the tasks?

- Working knowledge of SQL, python, and Jupyter Notebook is required. R is optional.
- Proficient in written English. Willingness to speak English whenever possible.

☞ Desirable qualifications

- Finished two or more Statistics courses
- Finished two or more Computer Science/Engineering courses
- Participated in one or more Kaggle competitions
- Created online dashboards for information visualization
- Any evidence of deep dive (on any topic) is a plus

5. Methodology of Training

☞ Include specific tasks and activities and/or methodology of training.

- The intern will meet the supervisor twice a week to present progress and discuss next steps. The supervisor will also connect her/him with relevant stakeholders to speak regularly.
- The intern will be encouraged to participate in daily SCRUM meetings with the service and development teams to learn how tasks are performed and the data needs.

6. Milestone

☞ Time schedule for the program

Intern projects will be the same as regular employee's project, and our intern program's primary goal is to find a good candidate to hire as a full time in the future.

- Week 1-2: Orientation and work environment setup
- Week 3-23: Weekly assignment and presentation
- Weeks 6, 12, 24: Performance reviews

Internship Details – Laon People

1. Goals and Objectives
☞ Description of specific goals and objectives for this program

LAON PEOPLE specialize own developed deep learning algorithm and HW and SW combined machine vision solution. Intern can utilize our industry leading AI algorithm through team work with our advanced engineers

LAON PEOPLE AMERICA operates AI Traffic Business, so POC with San Jose DOT will give intern global experience and widen insights

2. Working Conditions and Environment

a. Working Conditions

☞ Description of compensation and benefits for Interns
 - Experience with advance technology like machine vision and deep learning
 - Understand how technology realize the company business
 - Highly interact with data analyst
 - Monthly Compensation $2,000 with free lunch and snacks.

b. Working Environment

☞ Description of the site where Interns will work
 - Locates in 3003 North First Street, San Jose CA 95054
 - Utilize KOTRA and KIC network
 - Provides with a dedicated work area and the equipment to perform the assigned tasks
 - Flexible and friendly working culture

☞ Description of the Korea branch office where Interns will work for the time being(If applicable)
 - Locates Pangyo-ro 723 Bundang, Seongnam Korea 13511
 - Provides with a dedicated work area and the equipment to perform the assigned tasks

c. Training Site Picture

U.S.A	Korea(if applicable)

3. Trainee's Roles and Responsibilities (in detail)

☞ Description of Interns' job description during the program

- Localization of AI Traffic solution
- POC with USA City and States DOT (Department of Traffic)

☞ What specific knowledge, skills, or techniques will be learned?
 - Object Detection, Object Tracking, Image Recognition
 - Deep Learning Framework Optimization (Caffe, PyTorch, Tensorflow, Darknet..)
 - Deep Learning Kernel Optimization
 - Windows & C++ base Algorithm development

4. Requirements for Position

☞ Which specific knowledge, skills, or techniques will be required to perform the tasks?
 - c++, visual studio code, windows, pytorch, tensorflow, deep laearing

5. Methodology of Training

☞ Include specific tasks and activities and/or methodology of training.

- Daily meeting with Senior Data Analyst to understand deep learning algorithm processing
- Cooperate with Marketing team to organize promotion

6. Milestone

☞ Time schedule for the program

Detail tasks will be assigned based on the intern's choice.

Intern projects are the same as regular employee project and our intern program's primary goal is to find a good candidate to hire as a full time in the future.

- Week 1 – Orientation of development environment
- Week 2 – Learn field operation and deep learning processing, Write Objective and Key Results for The internship.
- Week 3 – 16 – Design and Implement assigned task
- Week 17-27 – Test at the real environment and improve the code.

Internship Details - Pixelic

1. Goals and Objectives

☞ Description of specific goals and objectives for this program

Pixelic is making unified inbox software for all of SaaS notifications in one place, Hyperinbox. The intern will participate development process of Hyperinbox.

2. Working Conditions and Environment

 a. Working Conditions

☞ Description of compensation and benefits for Interns

- Experience with advance technology in SaaS industry
- Compensation: 1,700 USD/month
- Free subscription charge of SaaS apps. for productivity (e.g. Superhuman)
- Regular 1:1 meetings with co-founders
- Education / Foundational / Social Events
- Flexible and friendly working culture
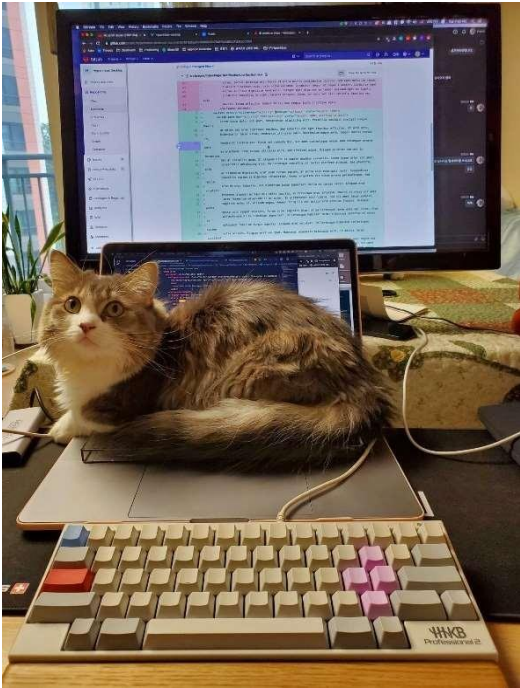
 b. Working Environment

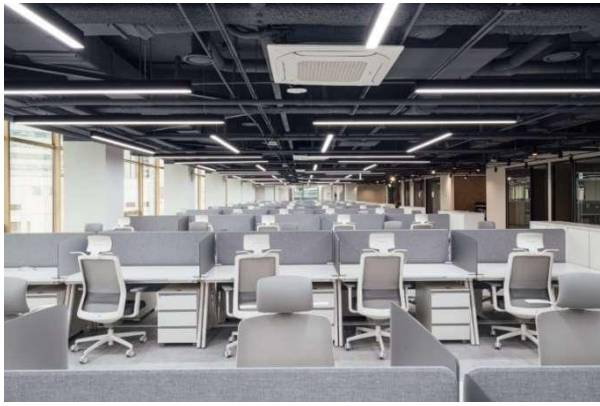☞ Description of the site where Interns will work

We are 100% distributed work force around the world, and two of us now in Chicago, IL, another is in London, and others are in Seoul, Korea.

☞ Description of the Korea branch office where Interns will work for the time being(If applicable)

Korea branch office is in Front1 running by D.Camp, located in Gongduk station (Line 5, 6, Airport, and Gyeongui-Jungang)

c. Training Site Picture

U.S.A	Korea(if applicable)

3. Trainee's Roles and Responsibilities (in detail)

☞ Description of Interns' job description during the program

You will:

- Help us design, build and distribute our product (Hyperinbox) that helps our user get out of tons of notifications from their work apps.
- Work directly with tech lead (and CEO) to ship code to global users
- Participate daily scrum and a weekly meeting discussing product and users.
- (Sometimes) Meet users directly through Zoom and learn how they use our product and how much they love our product.
- Envision entire new products, features, and flows that are inspired, considered, and magical.

☞ What specific knowledge, skills, or techniques will be learned?

- Basic knowledge of software engineering for web-based SaaS, using Ruby on Rails, Vue.js
- Experiences making application using open API for third-party applications.
- Project management skills using agile methodologies, communication skills for product management
- Experiences running global software product

4. Requirements for Position

☞ Which specific knowledge, skills, or techniques will be required to perform the tasks?

- Programming experience for web-based software application
- Basic knowledge on web-based software product
- Ability to work in teams
- Experience with at least one high-level programming language (e.g. Java, Javascript)
- (Preferred) Experience with a programming language based on MVC framework (e.g. Ruby on Rails, Python)

5. Methodology of Training

☞ Include specific tasks and activities and/or methodology of training.

- Participate in daily SCRUM meeting with tech lead and other executives to understand how we work and how thing's going on.
- Filliped learning with articles and online courses

6. Milestone

☞ Time schedule for the program

- Week 1 – Orientation for development environment
- Week 2 – Learn filed operation and basic code repositories. Set objectives and key results for the internship.
- Week 3 ~ 24: Design and implement assigned tasks

Internship Details – XL8

1. Goals and Objectives

☞ Description of specific goals and objectives for this program

- Data is the heart of ML systems. We'd like to use this internship program to seek a talented intern who can quickly learn and contribute to our data pipelines. Meanwhile, it'd be also a great opportunity for both the intern and the company to potentially pursue a long-term relationship even after the intern's graduation from their school, e.g. converting a full-time position either in Silicon Valley or in Korea .

2. Working Conditions and Environment

a. Working Conditions

☞ Description of compensation and benefits for Interns

- Experience with senior engineers from Google, Apple, and Qualcomm
- Learning opportunities from production ML data workflows and pipelines
- Monthly Compensation of $2,700
- Free lunches and snacks
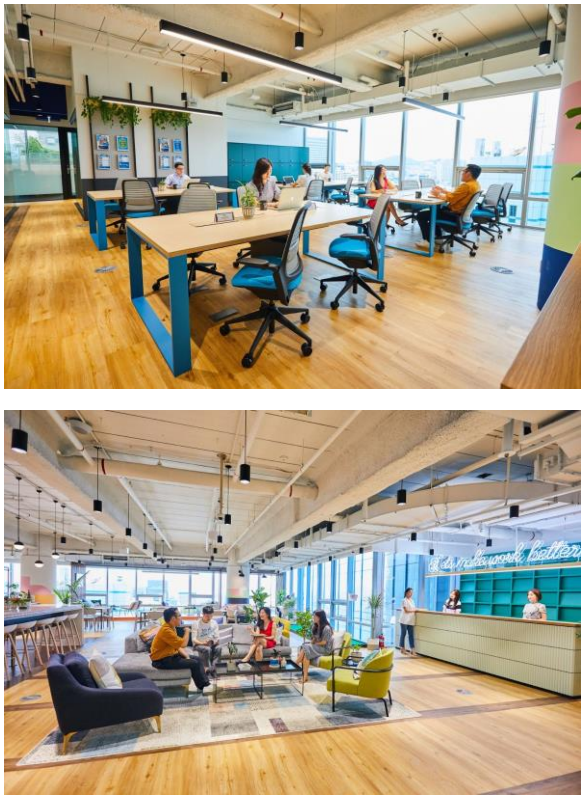
b. Working Environment
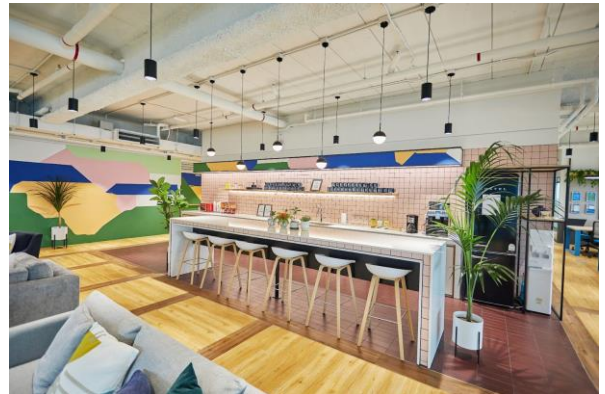
☞ Description of the site where Interns will work

- Located at 690 Saratoga Ave., San Jose, CA 95129
- A private room office in a coworking office space, ZED
- Walking distance to many cafes and restaurants around

☞ Description of the Korea branch office where Interns will work for the time being(If applicable)

- Located at 431, Teheran-ro, Gangnam-gu, Seoul 06159, South Korea
- A private room office in a coworking office space, JustCo

c. Training Site Picture

U.S.A	Korea(if applicable)

3. Trainee's Roles and Responsibilities (in detail)

☞ Description of Interns' job description during the program
- Building Pipelines for ML systems. The intern will build a couple pipelines for various ML systems that we train and use for inference in production.
  - Data Preparation Pipeline
    - This pipeline downloads the source data stored in the AWS S3. It splits the data into three groups, 1) a train set, 2) a validation set, and 3) a test set. Then, it applies filtering using alignment algorithms.
    - This pipeline also confirms the consistency of the current and the previous data.
  - Training and Validation Pipeline
    - This pipeline runs data binarization and training scripts with a target sentence pair data.
    - This pipeline keeps the users up-to-date regarding its status and uploads the final model and the metadata to S3 when it's completed.
    - This pipeline runs automatic evaluation of the trained model on validation and/or test sets and keeps track of the evaluation results on the server.
- Visualizing business data
  - Developing dashboards for
    - Data Pipelines
    - Evaluation History
    - Business Intelligence

☞ What specific knowledge, skills, or techniques will be learned?
- Knowledge on ML system infrastructure
- Training techniques of Machine Learning models
- Architectures of state-of-the-art Deep Learning models
- Data Engineering specifically for Analytics and NLP

4. Requirements for Position

☞ Which specific knowledge, skills, or techniques will be required to perform the tasks?
- Python
- Data Processing (such as Hadoop, Spark, etc)
- Apache Airflow (recommended but not required)
- Streamlit.io (recommended but not required)

5. Methodology of Training

☞ Include specific tasks and activities and/or methodology of training.
- Thorough peer code reviews from experts experienced at Apple, Google, and Qualcomm
- An iterative process of ideation, design, development, and feedback
- 1:1 with the mentor, also with other members of the company including CEO

6. Milestone

☞ Time schedule for the program

1. Data Preparation Pipeline (July 2021 - Aug 2021)
    a. Developing basic pipeline (data download, extraction, split, filtering, deploying, etc): July 2021
    b. Developing advanced features (consistency check, duplication removal, periodic data download, etc): Aug 2021

2. Training and Validation Pipeline (Sep 2021 - Oct 2021)
    a. Developing basic pipeline (data binarization, launching training and validation, model upload and notification): Sep 2021
    b. Developing advanced features (Identification of errors/exceptions during training and re-launching, extension of the pipeline to different types of models and tasks): Oct 2021

3. Data Visualization (Nov 2021 - Dec 2021)
    a. Developing a web interface to visualize the status of the data preparation, training and validation pipelines: Nov 2021
    b. Extending the web interface by supporting search data/model history, scheduling a new preparation/training tasks on the web: Dec 2021