# CDF0028: Advanced Web Programming

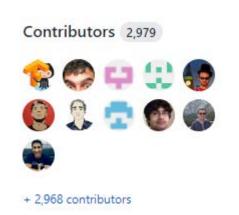
Donghyun Kang (donghyun@changwon.ac.kr)

NOSLab (<a href="https://noslab.github.io">https://noslab.github.io</a>)

**Changwon National University** 

### 오픈소스 프로젝트의 특징

- 여러 사람이 동시에 개발을 진행함
- 개발 기능 및 코드의 양이 방대함
- 파일/기능이 변경될 가능성이 높음



*	tensorflower-gardener Polish	TFLite docs: in exa X cb207d1 27 minutes ago	110,204 commits
	.github	Merge pull request #48591 from bhack:patch-14	6 days ago
	tensorflow	Polish TFLite docs: in example pages, add quick links to	27 minutes ago
	third_party	Update TFRT dependency to use revision	2 hours ago
	tools	Merge pull request #25673 from Ryan-Qiyu-Jiang:env_c	2 years ago
	.bazeIrc	Merge pull request #48522 from yongtang:no-aws-hdfs	7 days ago
	.bazelversion	Updating TensorFlow's bazel version 4.0.0 (the first LTS r	4 months ago
	.gitignore	Ignore CoreML BUILD files which are generated by the c	13 months ago
	.pylintrc	Add soft-link to pylintrc to project root	2 years ago
	ACKNOWLEDGMENTS	TensorFlow: Improve performance of Alexnet	6 years ago
	AUTHORS	Format AUTHORS file (#14881)	4 years ago
	BUILD	[NFC, internal change] Polish copybara workflow file.	4 months ago
	CODEOWNERS	Add penpornk@ as a /tensorflow/core/kernels/mkl/ revi	5 months ago
	CODE_OF_CONDUCT.md	Update CODE_OF_CONDUCT and fix broken sync	3 months ago
	CONTRIBUTING.md	Merge pull request #48150 from bhack:patch-9	28 days ago
	ISSUES.md	Internal change	3 months ago
	ISSUE_TEMPLATE.md	Merge pull request #40033 from AbdulBaseerMohamme	11 months ago
	LICENSE	Remove copyright notice from LICENSE, and add note in	last month
	README.md	Merge pull request #48764 from tensorflow:angerson-c	12 days ago
	RELEASE.md	Add tf.linalg.eigh_tridiagonal, which computes the eigen	3 days ago
	SECURITY.md	Replace instances of "whitelist" with "allowlist" where po	10 months ago
	WORKSPACE	Prevent buildifier warning in WORKSPACE file.	3 months ago
	arm_compiler.BUILD	Update the compiler_pieces of the RPi ARM compiler.	29 days ago
	configure	perfer python3 to compile	13 months ago
	configure.cmd	Update configure.cmd	9 months ago
	configure.py	Merge pull request #48522 from yongtang:no-aws-hdfs	7 days ago
	models.BUILD	Make models.BUILD filegroup include everything but me	4 years ago

## 오픈소스 프로젝트의 문제점

• 하나의 코드/파일을 동시에 편집한다면?



### 버전 관리가 필요함

### Git

• 컴퓨터 파일의 변경사항을 추적하고 여러 명의 사용자들 간에 해당 파일들의 작업을 조율하기 위한 **분산 버전 관리 시스템** 

[https://en.wikipedia.org/wiki/Git]

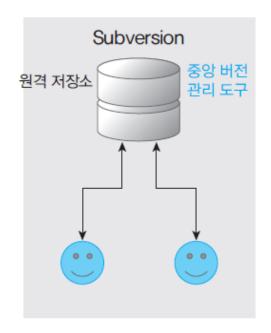


• Git은 리누스 토발즈(Linus Torvalds)에 의해 개발됨



### 분산 버전 관리

• 중앙 버전 관리(Subversion) vs. 분산 버전 관리(git)



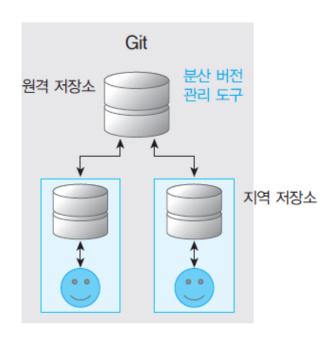


그림 9-1 Git은 원격 저장소와 지역 저장소 두 개가 존재한다.

### 분산 버전 관리

- 원격 저장소(Remote Repository)
  - 다수가 공유하고 있는 원격의 공용 저장소
- 로컬 저장소(Local Repository)
  - 개인만 사용하는 단독 저장소
- 로컬 저장소에서 개발하고 평가가 완료된 내용에 대해서 원격 저장
   소 저장
- 왜 저장소를 분리할까?

### Git vs. Github

- Git
  - Linux (<a href="http://git.kernel.org">http://git.kernel.org</a>)
  - Apache (<a href="http://git.apache.org">http://git.apache.org</a>)
  - Tizen(<u>http://git.tizen.org</u>)
  - ...
- Github
  - Tensorflow (<a href="https://github.com/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/tensorflow/te
  - MySQL (https://github.com/mysql)
  - Node.js (<a href="https://github.com/nodejs">https://github.com/nodejs</a>)
  - ...

### **Github**

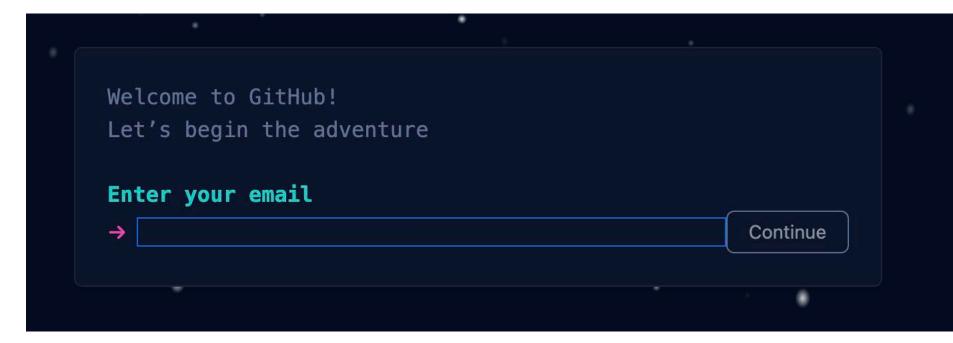
• 분산 버전 관리 툴인 깃 (Git) 프로젝트를 지원하는 Internet hosting 서비스

[https://en.wikipedia.org/wiki/GitHub]

# **GitHub**

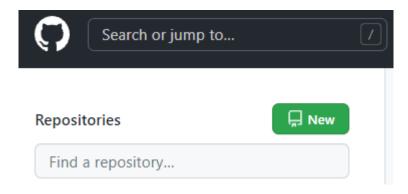
### Github 생성

- 계정 생성
  - https://github.com/
    - Sign up



# Github.io 페이지 생성

• 신규 Repository 생성



### Github.io 페이지 생성

• 신규 Repository 이름 설정

#### Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? Import a repository.



### Index.html 파일 생성



```
<!DOCTYPE html>
<html>
<body>
<h1>Hello World</h1>
I'm hosted with GitHub Pages.
</body>
</html>
```

# 실습

- 홈페이지의 내용을 작성해 보세요
  - 자유 주제
  - 학습한 태그 사용

### Q&A