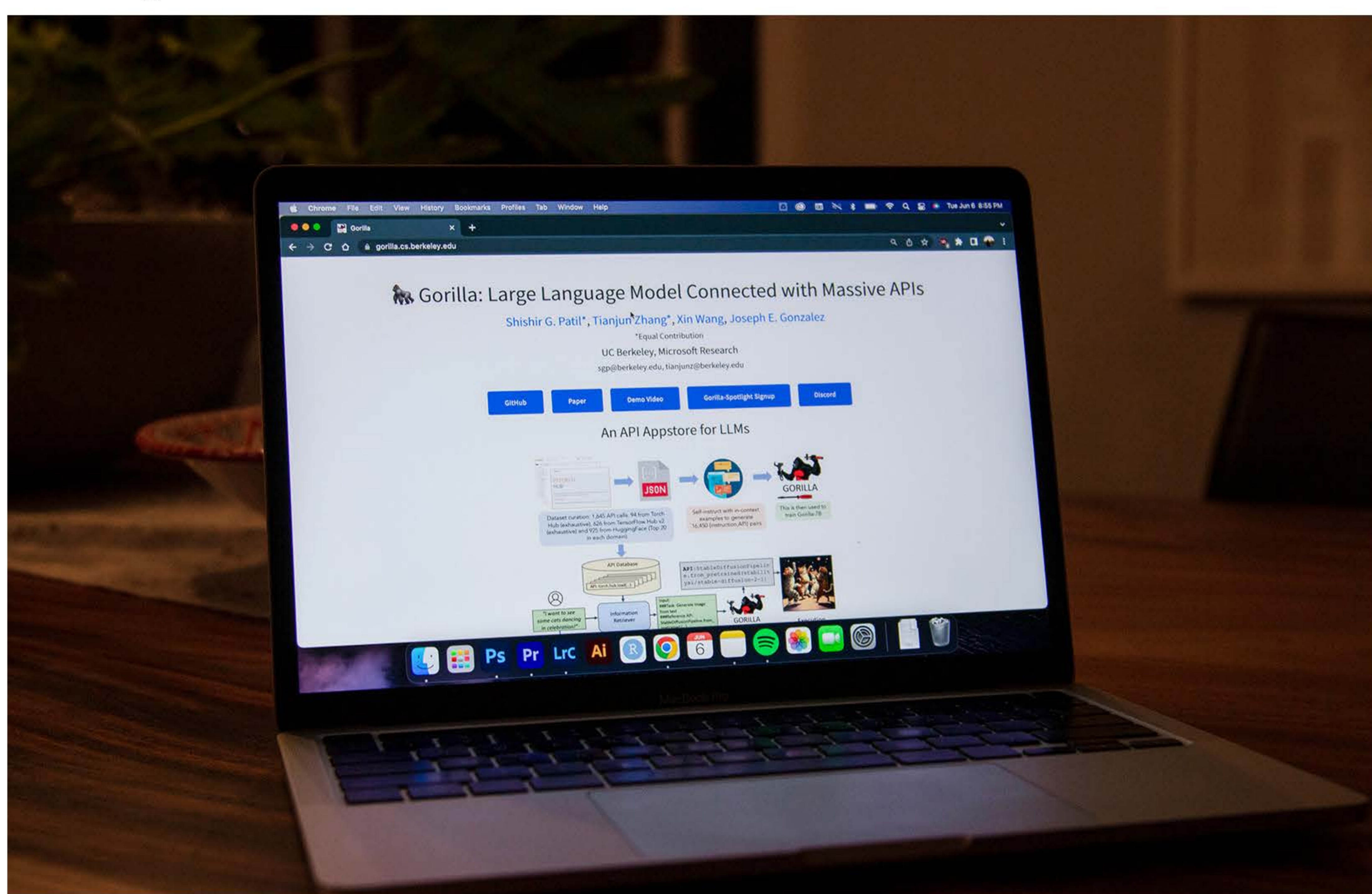


Join The Daily Californian • Applications due Friday, May 26 at 11:59 p.m. • bit.ly/dcsummer23

NEWS / CAMPUS / RESEARCH & IDEAS

'Unlocking the new next frontier': UC Berkeley researchers develop innovative AI 'Gorilla'



KAYLA SIM | STAFF

The team behind Gorilla trained it on a specific training recipe and designed it to connect large language models, or LLMs, with services accessed through application programming interfaces, or APIs, according to Patil.

SUPPORT OUR NONPROFIT NEWSROOM. We're an independent student-run newspaper, and need your support to maintain our coverage. DONATE button.

NATASHA KAYE | STAFF

16 HOURS AGO

Researchers from the Sky Computing lab and the Berkeley AI Research, or BAIR, Lab recently released Gorilla, a large language model, or LLM, designed to revolutionize the way AI algorithms function, according to Shishir Patil, campus computer science doctoral student and project lead.

Since the release of OpenAI's ChatGPT in November 2022, researchers around the world have been brainstorming ways to increase the efficiency and abilities of LLMs.

ChatGPT generates a response to the question a user asks based on what it learned during its training phase. While this question and answer function is popular given its novelty, Patil said looking forward, there are more useful functions for this technology.

"One example could be you want to book a flight ticket, right? Or you want to book a reservation at a restaurant. Now today, an LLM cannot do that because it cannot interact with the rest of the world. So that's where Gorilla comes in. Gorilla is a large language model that trains LLMs how to interact with the rest of the world through tools," Patil said.

The "tools" being used to teach this model are application programming interfaces, or APIs, which allows systems to communicate with one another, according to Patil.

The team behind Gorilla trained it on a specific training recipe and designed it to connect LLMs with services accessed through APIs, according to Patil. The models and code the team used for training are all open sourced — meaning they are available in the public domain — allowing for quick processing times.

Just this morning, the team released a newer model with an Apache-2.0 license, allowing it to be used commercially, according to Patil.

"We are studying ways to automatically integrate with the millions of services on the web by teaching LLMs to find and then read API documentation," said Joseph Gonzalez, a professor in the electrical engineering and computer sciences department and the director of the Sky Computing lab, in an email.

In addition to Gorilla's API capabilities, Patil noted the model can measure how much it "hallucinates," or how often it relays made-up information.

Because LLMs are trained to generate their own answers, hallucinations are rather common. Gorilla, however, provides scientifically rigorous ways to determine exactly how much the model is hallucinating while also being proven to hallucinate less often than ChatGPT, according to Patil.

"As we are serving Gorilla to the outside world. We have multiple requests from Korea, Israel, obviously India, China and the Bay Area dominates," Patil said. "All of this is being sold on infrastructure that's being provided by UC Berkeley and more specifically the Skylab that we're all part of."

The researchers behind Gorilla include Patil and Tianjun Zhang, a campus computer science doctoral students; Gonzalez, who is the lead faculty member on the project and Xin Wang, a senior researcher at Microsoft who was a doctoral student of Gonzalez's at UC Berkeley.

Gonzalez noted the collaboration with Wang and her colleagues at Microsoft were "instrumental" to the success of Gorilla.

Patil noted the team named the project "Gorilla" because the animals use tools similarly to how they want their LLM to be used.

"This is like unlocking the new next frontier," Patil said. "Before, LLMs were this closed box that could only be used within this domain. Now by teaching LLMs how to write thousands of APIs, we are, in some sense, unlocking what an LLM can do. Now it's like there are no limits."

Contact Natasha Kaye at nkaye@dailycal.org

LAST UPDATED 16 HOURS AGO

APIS JOSEPH E. GONZALEZ, BAIR, CHATGPT, EECS, GORILLA, LARGE LANGUAGE MODELS, MICROSOFT, OPENAI, SHISHIR G. PATIL, SKY COMPUTING LAB, TIANJUN ZHANG, XIN WANG

STAY IN THE LOOP. Join our weekly newsletter! First, Last, Email, GO button.

LATEST

EDITORIALS MAY 24, 2023

In defense of 'niche subjects': Ron DeSantis got it wrong. Includes photo of Ron DeSantis.

CAMPUS MAY 23, 2023

Campus creates college of Computing, Data Science and Society, 1st college in 50 years. Includes photo of two women.

ACADEMICS MAY 23, 2023

Seven UC Berkeley professors selected to become NAS members. Includes photo of a group of people.

FILM & TELEVISION MAY 23, 2023

Ric Roman Waugh talks 'Kandahar,' action movies, human condition. Includes photo of Ric Roman Waugh.

BASEBALL MAY 23, 2023

Offensive bounceback against Washington sends Cal to Pac-12 tourney. Includes photo of baseball players.

CHECK OUT OUR MOST RECENT PRINT EDITION. Preview of The Daily Californian print edition with headlines like 'A homecoming for ferry service' and 'Berkeley Law honored for pro bono work'.

THE DAILY CALIFORNIAN SINCE 1871

FEATURED

- Special Issues, Editor's Picks, Awards, Photo Essays

NEWS

- Campus, City, County, State, National, Obituaries, Notes From The Field

SPORTS

- Football, M. Hoops, W. Hoops, Baseball, Softball, Bear Bytes, Columns, Special Report

ARTS

- Music, Film & Television, Theater, Visual Art, Literature, Fashion, Columns, Culture Shot, Video Games, Comedy, Local Events, Arts Awards, Best Of Berkeley

ADVERTISE

- LOCAL MEDIA KIT, NATIONAL MEDIA KIT

CLASSIFIEDS

- LEGALS, BROWSE NOTICES, PLACE NOTICES

ABOUT

OPINION

- Editorials, Op-Eds, Letters To The Editor, Columns, Editorial Cartoons

BLOG

- The Daily Clog, Eating Berkeley, Travel Blog, Strikeout, Editor's Blog

MULTIMEDIA

- News: City, News: Campus, Sports, Arts, Entertainment, Insider

WEEKENDER

PROJECTS