Celebrating Knowledge

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Don't Study to Earn, Study to learn, What You Learn today is what You will become tomorrow

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Vision

To foster the students by providing learner centric teaching environment, continuous learning, research and development to become thriving professionals and entrepreneurs to excel in the field of computer science and contribute to the society.

Mission

Providing value based education and contented learning experience to the students.

Educating the students with the state of art technologies and cultivating their proficiency in analytical and designing skills.

Enabling the students to achieve a successful career in Computer Science and Engineering or related fields to meet the changing needs of various stakeholders.

Guiding the students in research by nurturing their interest in continuous learning towards serving the society and the country.

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Libra Crypto Currency

With the long-awaited Libra white paper, Facebook is showing off its blockchain smarts, and making a bid for crypto credibility. The Libra Blockchain is a decentralized, programmable database designed to support a low-volatility cryptocurrency that will have the ability to serve as an efficient medium of exchange for billions of people around the world. The name is inspired by the origins of money in Ancient Rome, where the Libra was a unit of weight used to mint coins.

Libra also evokes the French libre and reflects the corresponding astrological symbol the scales of justice, relevant in theory because the crypto is meant to make financial inclusion standard around the globe. The new crypto's symbol, a wave, "represents the energy that flows between us, the borderless nature of water, and the movement between people, places, and money. A cryptocurrency is a digital or virtual currency that uses cryptography for security .

Cryptocurrencies use decentralized technology to let users make secure payments & store money without the need to use their name or go through a bank. They run on a distributed public ledger called blockchain, which is a record of all transactions updated and held by currency holders. The most common cryptocurrencies are Bitcoin, Ethereum, Ripple, and Litecoin.

	Bitcoin	Libra
CENTRALIZATION	Bitcoin is decentralized. No single entity controls it.	Facebook and the Libra Association have a large amount of control over the asset and its usage
VALUE	BTC price is not dependent on any single government in the same way seen in fiat currencies	Tied to leading national currencies and other stable financial assets
MONEY SUPPLY	Bitcoin is deflationary, as only 21 million bitcoins will ever exist	Controlled by Libra Association, subject to supply and demand
BLOCKCHAIN TYPE	Blockchain is permissionless; so miners can simply begin mining at their discretion	Initially will run on a permissioned blockchain; miners must seek approval before starting to mine

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Google Glass 2.0

Glass Enterprise Edition has helped workers in a variety of industries from logistics to manufacturing, to field services do their jobs more efficiently by providing hands-free access to the information and tools they need to complete their work. Workers can use Glass to access checklists, view instructions or send inspection photos or videos, and its enterprise customers have reported faster production times, improved quality, and reduced costs after using Glass.

Glass Enterprise Edition 2 designed with safety frames by Smith Optics. Glass is a small, lightweight wearable computer with a transparent display for hands-free work

Glass Enterprise Edition 2 is built on the Qualcomm Snapdragon XR1 platform, which features a significantly more powerful multicore CPU (central processing unit) and a new artificial intelligence engine. This enables significant power savings, enhanced performance and support for computer vision and advanced machine learning capabilities. Google partnered with Smith Optics to make Glass-compatible safety frames for different types of demanding work environments, like manufacturing floors and maintenance facilities.

Glass Enterprise Edition 2 features improved camera performance and quality. It also has an added USB-C port that supports faster charging, and increased overall battery life to enable customers to use Glass longer between charges. Glass Enterprise Edition 2 is easier to develop for and deploy. It's built on Android, making it easier for customers to integrate the services and APIs (application programming interfaces). It also supports scaled deployments, and Android Enterprise Mobile Device Management.

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Heartbeat Detection Laser

Recently, the Pentagon unveiled a long-range laser device capable of detecting a person's unique heart-signature. It was designed to thwart terrorism, but could lead to the Holy Grail of civilian surveillance: an ethical, non-invasive method of conducting biometric identification from afar.

Science fiction has long told us that wars in the future would be fought with lasers, we just assumed they'd be weapons. The Pentagon's heartbeat-detecting laser, called Jetson, is entirely harmless. It uses a technology called vibrometry to detect the subtle vibrations of a person's body caused by the movement of blood throughout their circulatory system.

The significance here is that our heartbeat is unique. As an anti- terrorism tool the laser makes perfect sense. With an effective range at just over 200 meters, the device would theoretically function like a sniper weapon. A human operator would aim the laser and, under its current technical limitations, keep it trained on a target for about 30 seconds. Once a target's been tagged by their heartbeat, the laser system can confirm their identity later by repeating the process.

For example, soldiers performing reconnaissance could obtain the heart-signature of suspected terrorists ahead of a mission. Such intelligence would allow any fire team sent to engage the terrorists later to take out only those pre-tagged.

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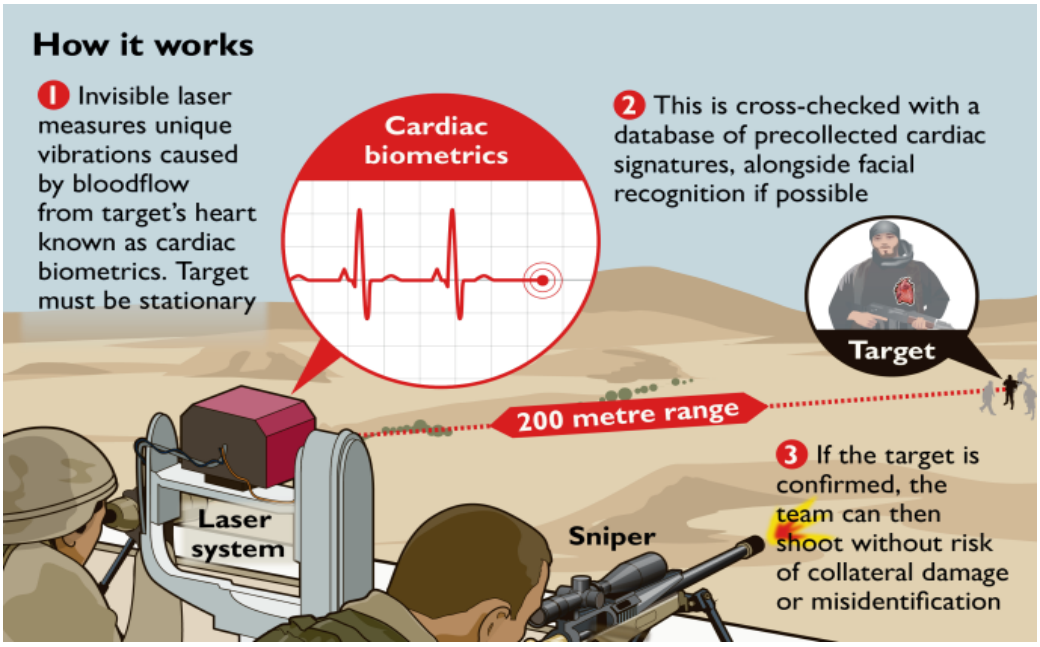

PyOxidizer

Python programming language - PyOxidizer tackles 'existential threat' posed by app distribution problem. The Python programming language may be hugely popular among developers but sharing a Python app with an average computer user is still tricky. The problem of not being able to simply package up Python apps was singled out as a threat to the future of the language . PyOxidizer aims to solve complex packaging and distribution problems so that developers can put their efforts into building applications instead of juggling with build systems and packaging tools

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PyOxidizer

How PyOxidizer is different from other Python application packaging /distribution tools

PyOxidizer provides the following benefits over other Python application packaging/distribution tools,
It works across all popular platforms, unlike many other tools that only target Windows or macOS.
It works even if the executing system does not have Python installed.
It does not have special system requirements like SquashFS, container runtimes, etc.
Its startup performance is comparable to traditional Python execution.
It supports single file executables with minimal or none system dependencies.

PyOxidizer is still in its early stages. However, not much has been implemented yet to solve the distribution part of the problem. Some of the missing features that we can expect to come in the future are an official build environment, support for C extensions, more robust packaging support, easy distribution, and more.

Here are some of the features PyOxidizer comes with...

Generates a standalone single executable file.

One of the most important features of PyOxidizer is that it can produce a single executable file that contains a fully-featured Python interpreter, its extensions, standard library, and your application's modules and resources. PyOxidizer embeds self-contained Python interpreters as a tool and software library by exposing its lower-level functionality.

PyOxidizer executables are faster to start and import

During the execution, binaries built with PyOxidizer does not have to do anything special like creating a temporary directory to run the Python interpreter. Everything is loaded directly from the memory without any explicit I/O operations. So, when a Python module is imported, its bytecode is loaded from a memory address in the executable using zero-copy. This results in making the executables produced by PyOxidizer faster to start and import.

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AI for Severe Weather Prediction

When forecasting weather, meteorologists use a number of models and data sources to track shapes and movements of clouds that could indicate severe storms. However, with increasingly expanding weather data sets and looming deadlines, it is nearly impossible for them to monitor all storm formations, especially smaller-scale ones in real time.

Now, there is a computer model that can help forecasters recognize potential severe storms more quickly and accurately, thanks to a team of researchers at Penn State, AccuWeather, Inc., and the University of Almería in Spain. They have developed a framework based on machine learning linear classifiers ,a kind of artificial intelligence, that detects rotational movements in clouds from satellite images that might have otherwise gone unnoticed. This AI solution ran on the Bridges supercomputer at the Pittsburgh Supercomputing Center.

The researchers worked with other AccuWeather meteorologists to analyze more than 50,000 historical U.S. weather satellite images. In them, experts identified and labeled the shape and motion of "comma-shaped" clouds. These cloud patterns are strongly associated with cyclone formations, which can lead to severe weather events including hail, thunderstorms, high winds and blizzards. Then, using computer vision and machine learning techniques, the researchers taught computers to automatically recognize and detect comma-shaped clouds in satellite images. The computers can then assist experts by pointing out in real time where, in an ocean of data, could they focus their attention in order to detect the onset of severe weather.

The researchers found that their method can effectively detect comma-shaped clouds with 99 percent accuracy, at an average of 40 seconds per prediction. It was also able to predict 64 percent of severe weather events, outperforming other existing severe-weather detection method .

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Websites for Online Courses

General Assembly - https://generalassemb.ly/
Kahan Academy - https://www.khanacademy.org/
udacity - https://www.udacity.com/
Edx - https://www.edx.org/
Skill share - https://www.skillshare.com/
Iversity - https://iversity.org/
Bloc - https://www.bloc.io/
Code Academy - https://www.codecademy.com/

Websites for Online Coding

Code Academy - https://www.codecademy.com/
Codechef - https://www.codechef.com/
Codein Game - https://www.codingame.com/
Techgig - https://www.techgig.com/
Hackerrank - https://www.hackerrank.com/
Hacker Earth - https://www.hackerearth.com/
Geeks for Geeks - https://www.geeksforgeeks.org/

"Knowledge is most useful when Liberated and Shared"

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