



Startups

LATEST NEWS [Morgan Stanley says private investment to recover next fiscal](#)



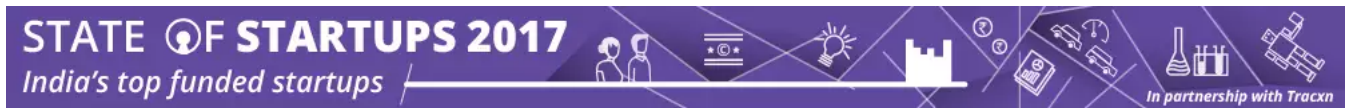
- Home
 - RISE**
 - SME
 - Startups**
 - Policy
 - Entrepreneurship
 - Money
 - Security-Tech
 - Marketing
 - HR
 - Legal
 - Resources
 - Biz Listings
 - New More
- NewsBuzz | Features

ET Home > RISE > Startups

Search for News, Stock Quotes & NAV's

04:05 PM | 28 NOV | **EOD** | **MARKET STATS** | Sponsored Mutual Funds **★★★★★** | **DSP BlackRock Opportunities** | NAV **₹233.15** | Day Change **0.54 (0.23%)** | Class:Equity | Category:Multi Cap | 1M 2.82 | 6M 13.71 | Returns in % | 1Y 35.1 | 3Y 18 | **START SIP** | For regulatory disclaimers, click here.

NEWS FLASH | [I am chinamma of Telangana: Sushma Swaraj](#)



Why Amazon, Disney and Uber are courting this two-year-old startup

By [Anu Thomas](#), ET Online | Updated: Aug 22, 2017, 05:30 PM IST

5 Comments



Bootstrapped until recently, Julia Computing has financed its growth using customer revenue and grants from organizations such as the Betty Moore Foundation and New York-based not-for-profit institution Alfred P. Sloan Foundation.

Name of the company: Julia Computing
Launch date: July 2015
Founding team: Dr [Viral Shah](#), Dr [Jeff Bezanson](#), [Stefan Karpinski](#), Prof. [Alan Edelman](#), [Keno Fischer](#), Deepak Vinchhi
Location : Boston, Bengaluru, London & New York
Funding raised in 2017: \$4.6 million
Overall funding raised since starting up: \$4.6 million
Jobs added since starting up/Strength of the company: 22
Industry it operates in: Technology

What does Amazon, Disney and Uber have in common? Aside from being large corporations drawing billions of dollars every year, their collaboration with a two-year-old startup bands them together - or rather sets them apart - in the tech-led business landscape.

From guiding self-driving vehicles to analyzing images from deep space, US and Bengaluru-based Julia Computing has developed a unique [programming language](#) that assists in running a gamut of applications.

Are you a GST Consultant? List your business for free & grow

CREATE FREE LISTING

Raja The Great, a Telugu action comedy film | Prime Video | Burn upto 20 kgs with this easy method. | NutraLyfe | Recommended By Colombia

And before dismissing it as yet another hackneyed product in the tech world, it may be prudent to understand why its creators assert it is better than major programming languages that exist today.

Cool tool

Launched in July 2015, Julia Computing claims to develop products that deliver a performance equivalent to five major programming languages - R, Python, MATLAB, C,

and [FORTRAN](#).

"Julia is up to 1,000 times faster than its competitors, is easy to learn and provides unlimited scalability," says Dr Viral Shah, co-creator of the programming language. "More importantly, it solves the age-old two-language problem," he adds.

Expounds Stefan Karpinski, Shah's UC Santa Barbara colleague and co-founder of Julia Computing:

"Data scientists, researchers and analysts no longer need to solve problems in one language and apply solutions in a second language, as has been the practice. Now they can use a single language - Julia - for prototyping as well as production," he says.

Little wonder then that adoption of Julia among enterprises spanning finance, robotics, energy, health, aerospace and genomics grew rapidly, aided and abetted by its combination of high performance and ease of use.

"Today, Julia is being used to guide self-driving vehicles, analyze images from deep space, help surgeons visualize patients' internal organs during surgery, assist the Federal Reserve Bank in conducting economic forecasts, drive the FAA's Next-Gen Aircraft Collision Avoidance System and much more," says Shah.

Steady progress

"What was initially driven by intellectual curiosity, developed into a full-blown computing language for data, analytics, machine learning and AI," says Shah.

Shah, who has a PhD in Scientific Computing, had previously been an executive for the Unique Identification Authority of India ([UIDAI](#)) project, where he designed the technology behind Aadhaar-based payments. He had also written an option pricing code base during his engineering days in Bombay that eventually became a part of what was then coming up as India's first derivative exchange at the NSE. It was around this time that the first seeds of Julia were sown.

"I had done some research with a professor at Santa Barbara while I was doing my PhD. That experience led me to further work on scientific computing with Prof. Alan Edelman and Dr Jeff Bezanon from MIT. Other co-founders, namely Harvard University's Keno Fischer and IIT's Deepak Vinchhi, also joined the project as it progressed.

Although founded by them, by virtue of being an open source software, hundreds have contributed either through code, documentation or tests to the Julia project.

As of now, the company has four main products that provide good revenue opportunity. This includes JuliaPro for researchers, scientists and analytics professionals, JuliaFin for the finance community, JuliaRun for cloud-based enterprise solutions and JuliaBox for students and others learning to use Julia.

Suited to local needs

According to the company, Julia is particularly relevant to India and offers an excellent solution to the country for a number of reasons:-

1. Julia is free and open-source, which means that enterprises are not forced to purchase licenses to use it, making it cost-effective. "Universities do not need to buy expensive licenses to teach fundamental skills that are crucial to a student's profession," adds Edelman.
2. As AI leads to large scale automation and redefines traditional jobs, India is expected to go through a large transition. According to Shah, Julia will make it possible for India to move up in the value chain of technology services offered worldwide.
3. Since Julia is a high-level language, researchers and analysts can focus on the problem they want to solve, ignoring the underlying mathematics that that function represents.
4. Julia is fast and high capacity, which makes all the difference when dealing with large

Most Read | [Most Shared](#) | [Most Commented](#)

[Here's how IIT Madras has become a haven for startups](#)

[Tiger Global Management to cash in \\$1 billion from Ola, Flipkart exits](#)

[Butt really? Karma Tips wants to save the planet - one cigarette at a time](#)

[Better than GPS: This digital address is pinpoint accurate, ensures you never get lost](#)

[100 MB internet for Rs 2: This startup wants to beat Jio at its own game](#)

[More »](#)

datasets.

"Increased adoption has led to increased demand for new custom features and packages for Julia and we are constantly trying to keep up with demand," says Shah. "We would love to develop everything that our users request, but we have had to prioritize package and feature development based on what provides more value for the Julia community and our customers," he says.

Looking ahead

It is no secret that Facebook, Apple and Google - all multi-billion dollar companies today - began as a dorm room or garage experiments. Efforts that start off as hobbies may or may not develop into full-fledged enterprises, but what unify those that do are the combination of a great idea with a stroke of good luck or timing.

Founded just two years ago, it may have miles to traverse before it hits the big-number valuations, but is already showing signs of potentially entering a league of its own.

"Despite initial challenges faced in user adoption because of limited package and feature availability, it has grown dramatically over the last one year," says Shah. As per the team's estimates, Julia has seen over 1 million downloads - a number that grew by 161% just last year. In fact, JuliaBox alone has over 75,000 registered users, according to the company. It is also reportedly one of the top 10 programming languages developed on GitHub.

Bootstrapped until recently, Julia Computing has financed its growth using customer revenue and grants from organizations such as the [Betty Moore Foundation](#) and New York-based not-for-profit institution Alfred P. Sloan Foundation. The company raised a seed fund of \$4.6 million from marquee investors in June this year to focus more on product strategy and growth.


Looking at the sector, the co-founders of Julia Computing see a tremendous opportunity for the company going forward. "We are in the era of AI, big data and real-time analytics, and Julia is perfectly positioned to be the language of choice in these fields," says Karpinski. "Julia clearly is faster, simpler, more sophisticated and has greater capacity than its competitors," he adds.

Launching V1.0 later this year is a crucial step for Julia and Julia Computing. "Based on current interest, we expect adoption to continue growing at breakneck speed or even accelerate after V1.0 is released," says Karpinski.

5
Comments

Are you a Business Owner? Get Your Free Business Listing on [Economic Times](#).

[Register Now](#)



Connect with us

Read more on

- [Viral Shah](#)
- [UIDAI](#)
- [Stefan Karpinski](#)
- [R](#)
- [Python](#)
- [Programming Language](#)
- [MATLAB](#)

Also Read

- [Samsung India R&D centre working on 5G technology: Dipesh Shah, MD, R&D Institute](#)
- [Artificial intelligence has come of age: R Chandrashekhar](#)
- [DMK retains Marudhu Ganesh for R.K. Nagar by-election](#)
- [China will continue to effect metal prices: R Sreesankar, Prabhudas Lilladher](#)
- [Pharma companies inflating R&D costs?](#)

Comments (5)

Add Your Comments



Raja The Great, a Telugu action comedy film
Prime Video

Burn upto 20 kgs with this easy method.
NutraLyfe

1 easy tip to stop hair loss & regrow your hair naturally!
Nutralyfe Regain

Looking for highly engaged audiences?
Times Group

More from The Economic Times



ONGC wants higher gas price to produce KG, Kutc...

Global businesses look bullish about the road ahead

Should you join a techies union to save your job?

Stress-related disorders take toll on telecom sector...

Get a Quote

Get Quote

Browse Companies

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z | 1 2 3 4 5 6 7 8 9

Browse Mutual Funds

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Powered by

Live Market
News
Portfolio
Mobile
Live TV
Biz Listings

Industry
Newsletters
Commodities
Speed
Blogs
RSS

About Us
Create Your Own Ad
Advertise with Us
Terms of Use & Grievance Redressal
Privacy policy

FOLLOW US

Download it from APP STORE

Download it from GOOGLE PLAY

Download it from Windows Store

Other Times Group news sites

इकनॉमिक टाइम्स | ඊ.ටී.එම්.සී. | Pune Mirror | Bangalore Mirror | Ahmedabad Mirror | ItsMyAscent | Education Times | Brand Capital | Mumbai Mirror | Times Now | Indiatimes | नवभारत टाइम्स | महाराष्ट्र टाइम्स | ವಿಜಯ ಕರ್ನಾಟಕ | Go Green | AdAge India | Eisamay | IGN India | NavGujarat Samay | Times of India | Lifehacker | Gizmodo | Samayam Tamil | Samayam Telugu | Miss Kyra | Bombay Times | Filmipop

Living and Entertainment

Timescity | iDiva | Entertainment | Zoom | Healthmeup | Luxpresso | Gadget Reviews | Titanium & Platinum Credit Card | Online Songs | MensXP | Hotels | Travel Destinations | Cricbuzz | Recipes | Gaana | Happytrips | Getsmartapp

Interest Network

itimes

Hot on the Web

Aadhaar Card | GST Rates | Gujarat Elections 2017 | GST | Business News | HDFC Standard Life Share Price | Sensex Today | Gold Rate | Sensex | Rahul Gandhi | Income Tax Calculator | Aadhaar

Services

Book print ads | Online shopping | Matrimonial | Astrology | Jobs | Tech Community | Property | Buy car | Bikes in India | Free Classifieds | Send money to India | Used Cars | Restaurants in Delhi | Remit to India | Buy Mobiles | Listen Songs | News | TimesMobile | Real Estate Developers | Restaurant Deals in Delhi | Car Insurance | Gadgets Now | Free Business Listings | CouponDunia | Remit2India | Techradar | AliveAR | Getsmartapp App | ETMoney Finance App | Feedback

In Case You Missed It

Ivanka Trump
Gujarat Elections
Narendra Modi
GST
Aadhaar
Gold Rate Today

Hyderabad Metro
Bitcoin Bubble
HDFC Life Share Price
GST Rates
Bharat 22 ETF
How to link Pan with Aadhaar Card

