I'm fortunate to have been involved with some amazing entrepreneurs and startups over the years, but each of those deals had some flaw when I invested. These obviously weren't disqualifying; it's just the reality that high-risk seed-stage venture investing is predicated on … risk. That’s why I’m both excited and somewhat concerned that I’ve recently had the opportunity to invest in a deal that is as close to the platonic ideal that I’m ever likely to see.
Julia Computing has a chance to redefine the way mathematics and science are practiced. You can read more about the myriad applications of Julia, from financial engineering to exploring the solar system, to discovering cures for cancer in their announcement. But in short, the way Red Hat makes Linux approachable to enterprises, Julia Computing does for the Julia programming language.

The deal also happens to have checked nearly every box I could reasonably expect as an investor:

**It solves a real technical challenge...**

Paul Graham has said that he’s rarely seen a tool that provides a 10X improvement to workers that isn’t rapidly adopted. If you give superpowers to well-paid professionals, you typically won’t struggle to build a business.
The open source Julia programming language does this for quants. The existing workflow for a data scientist or analyst at a hedge fund usually includes prototyping an idea in a tool like Matlab before writing production code in C. Julia's design allows for prototyping and writing of production code in one seamless experience. It's a true 10X benefit.

And the product is wildly popular among the geekiest of the geeks, with 33K+ commits, 500+ contributors, and 40+ releases on Github. Many of these numbers compare favorably to widely used tools like Node.js but are even more impressive given how technically intensive Julia is.

For an audience that is willing to pay...

Julia is versatile and powerful enough to be applied to many markets. On the surface, this seems like a strength, but products that can do anything often fail for lack of doing any one thing extremely well. Focus is required to fight your way into the market.

Strategy is often discussed as the consideration of all the things you can do, but it's really about the profitable options you choose to ignore. Julia Computing kicks off as laser focused not on a specific market, but an extraordinarily focused use case for a highly lucrative specialty in a specific market where customers are well compensated and desperately seeking a solution.

The focus of the founding team extends beyond selecting a vertical. Viral Shah and Alan Edelman sold me when they shared their
marketing strategy of “conference rooms and classrooms.” They eschew showy tradeshows and expensive sales reps in favor of opportunities to evangelize the product to potential users.

And is led by a team who already put the "Free" in "Freemium."

Investors typically float the development of the “free” part of the freemium products, but that’s not the case with Julia Computing.

The team launched Julia four years ago, based on nearly a decade of research and development, and have seen excellent growth in popularity since. There is an annual Julia convention, thousands of questions about the language on Stack Exchange, and many other markers that show Julia has found product-market fit.

Julia fits a pattern we see with many of the best companies in this mode - Github, Unity, etc. - which bootstrapped the early product development and only turned to investors when it was time to build premium offerings. The Julia team nailed the “Free,” we’re thrilled to try to help them market the “Mium.”

Beyond the financial aspect of “free,” the team has demonstrated a remarkable dedication to the “free as in speech” aspects of open source that the best startups employ. The Julia trademark will be held in an independent trust that ensures the language can’t be monopolized. They are focusing on a single specific application of the language leaving room for other entrepreneurs to build businesses of their own. If anything, the addition of venture capital to the company will likely
only benefit the *language* by increasing the frequency and quality of commits!

**The deal was championed by a star...**

Donald Fischer helped launch Red Hat’s enterprise business and served as a VP while the company built a $13B franchise productizing parts of Linux. Donald is currently an investor at General Catalyst where he focuses exclusively on startups that build things for “congregations of developers.”

Donald has rock solid conviction around a single idea and is building an impressive portfolio with that insight. He introduced me to the founding team, and I’m so grateful for the opportunity to work alongside him again.

**It resonates with a prepared mind...**

My first job during my engineering degree was helping to design a National Naval GPS application. Initial simulation work in MATLAB helped me. I became more keenly aware of the prohibitive cost of MATLAB once it was no longer freely provided by my university. So I knew how powerful a tool it was and how out of reach it was for almost everyone else. It also became clear that open source tools started to outperform, and innovate more quickly, than many legacy tools. Many tools have tried to supplant MATLAB over the years, but none have been able to match its power levels—Julia does just that.

Venture investing is a bit like being a lion under the tree with limited energy. You need to be prepared, but patient in order to spring towards the deals you’re best suited for.

**Leverages an unfair advantage...**

Boston is home to three “M’s” that give Julia an unfair advantage. Mathematica, Mathworks, and MIT. It’s not to say that there aren’t brilliant mathematicians working in the industry in Tel Aviv and Palo Alto, but Massachusetts simply has the best-applied math minds, regarding quants and the specifically associated biz-dev talent, that you’ll find anywhere.
Brilliant mathematician programmers live everywhere. The Julia founding team was spread out across Boston, New York and Bangalore from day one—a truly global collaboration. Guido van Rossum launched Python from the Netherlands and R emerged from New Zealand, but when it comes to commercialization, there may be no greater repository of quantitative talent than exists on Boston’s Red Line.

And they didn’t need the money...

If you want to raise money from a VC, the best way is not to need it. When I was introduced to the team, they had all the capital they needed. They had been talking with Donald for years and they felt taking funds from Founder Collective was like “speed dating.”

This fundraising strategy wasn’t a pose. The Julia Computing founders weren’t playing hard to get. They didn’t know me and didn’t want to risk the uncertainty of adding an unknown quantity to their cap table. The founders care deeply about their company, but even more importantly, they have a deep sense of loyalty to the language and the community that develops it. The founder’s approach to funding signals quite a bit; they aren’t mindlessly chasing capital, they are prudent decision makers; they’re confident in their ability to run lean.
I had to enlist some of the best CEOs in our portfolio; SeatGeek’s Jack Groetzinger, PillPack’s TJ Parker, Olo’s Noah Glass, and Kuvee’s Vijay Manwani to help me make the case for Founder Collective.

I lied, no deal is perfect

Now that I’ve thoroughly jinxed the company by singing its praises, I must also note that deals that have looked like sure things have blown up while tiny checks into odd companies can return funds many times over.

It’s simply impossible to know how a company will do at the outset.

The true measure of success will only be known many years ahead, but I couldn’t be more excited to be working with Viral, Alan, Deepak, Keno, Jeff, Stefan, Donald, and the rest of the Julia Computing team.

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