# 2018 LLVM Foundation Board of Directors Application

This is an application to serve as a board member on the LLVM Foundation Board of Directors. The LLVM Foundation is a nonprofit that supports the LLVM Project. We support the LLVM community by helping it to grow, foster community interactions, work to keep LLVM development productive through infrastructure, and work to ensure the long term health of the LLVM project.

The LLVM Foundation has established 3 main programs to help us in our community growth and education efforts: Educational Outreach (LLVM Developers' Meetings, documentation, workshops, instructional videos), Scholarships & Grants, and Women in Compilers & Tools. We host much of the infrastructure (website, mailing lists, etc) supporting the LLVM Project. Please read our public documents for more information, available here (http://foundation.llvm.org/documents/).

The Board of Directors consists of 8 members serving 2 year terms, which then elect the next set of board members. In terms of time commitment, the board typically meets every month for 2 hours and every board member should plan on attending each meeting. At times a board member will take lead on a particular issue, doing the background research needed, forming a proposal, bringing to the Board for productive discussion and vote. Board members are expected to monitor the board mail lists to address time critical issues or continue discussions between board meetings. Board members should plan on attending at least EuroLLVM or the US LLVM Developers' Meeting. In addition to the regular meeting, board members are expected to participate with and drive efforts aligned with the mission and three programs above. Officers of the Board (Secretary, Treasurer, President) have additional duties and time commitments.

We are looking for people who are passionate and enthusiastic about LLVM and its various sub-projects, and want to help it grow. Note, however, that the LLVM Foundation does not set the technical direction for the project. As such, we are particularly interested in people who will bring non-technical contributions to the board, particularly if they align with the mission and three programs mentioned above or improvements to the LLVM infrastructure.

In order to improve transparency and capture the credentials of the newly elected board, the applications of the newly elected board members will be made public once board membership is finalized. The new board will begin their term on August 12, 2018.

If you are interested in being considered as a future board member, please complete the following application by July 30 (11:59PM PDT).

**Email address** *

███████████████

**Name (First and Surname)** *

Chandler Carruth

Please summarize relevant contributions to the LLVM Project. These can include things such as patches, code ownership, bug reports, mailing list posts, blog posts, volunteering at LLVM events, organizing LLVM social events, contributing to the developer meeting paper committee, etc.

I have been an active LLVM developer since 2007. Over the years, I have worked on:
- LLVM's memory model and atomics (the first bad version, and the current version)
- Clang's C++ support, and GCC-compatible driver
- The initial profile-aware code layout optimization pass
- Inlining (code owner), general call graph and IPO infrastructure
- Scalar Replacement of Aggregates and SSA formation (code owner)
- The x86 backend's address mode matching, vector legalization and shuffles
- ADT and support libraries (code owner), infrastructure, unit testing, code quality, etc.
- The introduction of new pass management infrastructure.

I have led Google's LLVM efforts since 2010. In that time I have shifted Google to base its internal C++ platform on Clang and LLVM. I have also started and shepherded a number of new efforts that have expanded the contributors, scope, and impact of the project:
- Building C++ tooling beyond code completion and indexing as part of the Clang project
- Adding C++ Modules to Clang
- Adding AddressSanitizer and other Sanitizers to Clang and LLVM
- Making Clang compatible with MSVC and available to the Windows C++ developer community, and helping drive Microsoft's increased and positive engagement
- Making Clang and LLVM a production quality CUDA compiler, compatible with NVCC out-of-the-box, and with better performance than NVCC on Google's benchmarks
- Supporting the use of LLVM as a component of domain specific code generation including Halide (graphics programming) and XLA (a backend for TensorFlow)
- Switching all of Google's production C++ compilation to LLVM instead of GCC.

Outside of Google, I give talks at both corporations and conferences across the industry that publicize and advocate for the LLVM project, the core LLVM optimizer, Sanitizers, Clang, and Clang-based C++ tooling. For example, I recently gave a talk at the inaugural Pacific++ conference that has already helped start some new users and companies experimenting with LLVM-based toolchains.

I have served on the board of the Foundation since its formation. In that capacity, I have started the process of adopting a code of conduct. I am currently helping drive the effort to move LLVM onto a modern license that addresses the on-going needs of the project.

Why do you want to be on the LLVM Foundation board of directors?

I care deeply about the LLVM open source project and community. I want to see it grow and thrive. As part of that, I want to ensure it has the support needed to attract ever more developers and be used in ever more exciting and impactful ways. One example of this is working on the license: while far removed from technical work that I do as my day job, it remains tremendously impactful and something that would be hard for many in the community to pursue. I feel like, by driving this and ensuring it progresses in a way that benefits the community, I can help ensure the long-term success of the project.

What experience or skills can you bring to the board? Which of the above programs could you help drive forward?

I bring a deep technical background to the board, with extensive connections in the technical parts of the LLVM project. I also bring the perspective of one of the large users of LLVM.

Beyond that, I have worked closely with the Foundation for years, and have a strong background with our efforts around conferences and licensing. I hope to bring my expertise and experience in those areas to bear as we move into some of the (we hope) final chapters of the effort to relicense LLVM.

While my primary focus on the board will likely remain on relicensing and other related infrastructure, I hope to support both our efforts in Education and Outreach through continued involvement in conferences (both LLVM's and others) and Women in Compilers & Tools through support and advocacy.

We value diversity and representation of the various interested groups working on LLVM and using it. Do you consider yourself representative of a minority group, underrepresented geographic region, etc?

No.

## Which program are you most interested in supporting?

○ Educational Outreach

○ Women in Compilers & Tools

○ Grants & Scholarships

◉ Infrastructure Support

## What is your second choice program to support?

◉ Educational Outreach

○ Women in Compilers & Tools

○ Grants & Scholarships

○ Infrastructure Support

## How many hours a week can you dedicate to LLVM Foundation business?
Board members are expected to dedicate time to meetings and to the programs.

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## Are you interested in a specific position on the board?

Please review position duties here: https://docs.google.com/document/d/14PZ-Mu2mQ0msUoh-SKZXFMQaC1rYHSZdb1N6cRT66mI/edit?usp=sharing

- ☐ President
- ☐ Secretary
- ☐ Treasurer

## Are you willing and able to help fundraise for the LLVM Foundation?

We rely on donations to fund our programs and need board members to help find new sponsors and donors.

Yes, I am happy to advocate, especially in corporate circles, for sponsoring LLVM and the ways it can directly benefit both companies and the project.

## Is there anything else you would like to add for the board to consider?

My sentiments have not changed much over the years. =]

Like last time, I view the role of the LLVM Foundation and especially its board to serve the needs of the community and project. I hope that I have effectively served over the past two years and hope to continue to serve going forward.

This form was created inside of LLVM Foundation.

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