Kotlin For Science
Foundation of Kotlin Scientific Libraries

Independent Society of Knowledge

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1   Introduction

Kotlin is a Statically types, language which gained popularity since its release in 2016. The language is used primarily by android developers since google announced it as the language to develope android apps. Independent Society of Knoweldge adapts Kotlin as its favoured development language. Kotlin provides a readable syntax since it is a high level language. It is developed on top of Java which is a rich language for several development purposes. And considering the speed it works better than alternatives like Python and Julia.

Although we mentioned the reasons and capabilities of Kotlin, it is not used in scientific programming and computational sciences. There are several reasons for this:

1. Kotlin is a new language and computational sciences has been working on many other old languages before Kotlin was published.

2. Because of its small history there aren't that many libraries that can be used for scientific purposes. Other languages are just more rich in this area

3. The community is focused on app/software development. You may see Kotlin being used in Android, Multiplatform, and even Backend development; the places where the community are working on the language extensively, unlike science, these areas are filled with packages and libraries for Kotlin.

This had been the reason for this project, *Kotlin for Science* is the initiative of using Kotlin for scientific purposes. The project would be led by the community and maintained by Independent Society of Knowledge.

In this document we investigate and propose a solution to enhance Kotlin language for science. Giving out a clear route to adapted pre-developed libraries in C to be used in Kotlin.

2   Kotlin Language

3   Binding C with Kotlin

4   Kotlin for Science Strategy

5   Development Plan

6   Costs

7   Promotion and Usage