

MASARYKOVA UNIVERZITA Fakulta informatiky

ZADÁNÍ DIPLOMOVÉ PRÁCE

Student: Bc. Tomáš Mészaroš

Program: Aplikovaná informatika

Obor: Aplikovaná informatika

Specializace: Bez specializace

Garant oboru: prof. RNDr. Jiří Barnat, Ph.D. (AP)

Vedoucí práce: Mgr. Marek Grác, Ph.D.

Katedra: Katedra strojového učení a zpracování dat

Název práce: Extracting Parts of Programs into Separate Binaries

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Zadání:

- Get acquainted with means of the compilation of C programs using the LLVM compiler infrastructure clang, LLVM Internal Representation, AST, LLVM optimizations.
- Propose a solution to statically transplant a subset of a C program. This subset should be extracted from the original program and synthesized as an independent binary.
- Design and implement the proposed solution in a tool having an appropriate form (a standalone application or an LLVM plugin).
- Test the implemented tool on at least 2 real-world open-source C programs.