

Incomplete List of Projects

PHP

- HipHop Virtual Machine (HHVM)
- Zend Virtual Machine
- JPHP
- Improving memory management of PHP

Python

- Improving memory manager of CPython
- PyPy
- Jython

Web and JavaScript

- Chrome V8
- Mozilla's SpiderMonkey
- Safari's WebKit
- Microsoft Edge's Chakra
- WebAssembly

Compiler

- Scala Native, an optimizing ahead-of-time compiler for Scala
- Just in Time Compilation in JVMs
- Adaptive optimization in JVMs

Concurrency

- Concurrency study of Python
- Concurrency study of JavaScript
- Concurrency study of Rust
- Concurrency study of Scala

Tools

- Maxine VM
- GraalVM
- Jikes RVM
- Low Level Virtual Machine (LLVM)

Memory Management

- Modern Concurrent Garbage Collectors
- Modern High-Performance Memory Allocators
- Hardware Garbage Collectors
- Modern Garbage Collectors for Big Data Systems