# Ömer Sinan Ağacan, CV

### Personal info

I'm a PhD student and research assistant and Indiana University, programming languages group.

Email: omeragacan@gmail.com Github: http://github.com/osa1

Blog: <a href="http://osa1.net/">http://osa1.net/</a>

StackOverflow: <a href="http://stackoverflow.com/users/691032/sinan">http://stackoverflow.com/users/691032/sinan</a>

### Education

• TOBB University of Economics and Technology, 2009 – 2014

• Indiana University, PhD student, Computer Science, 2015 – present Adviser: Ryan Newton

### **Programming Skills**

*Languages*: Fluent in Haskell, Lua, C, Java. Working knowledge of Coq, Rust, Python, Java, OCaml, Common Lisp, Prolog.

Development environment: Linux, zsh, git, vim (my config: https://github.com/osa1/rcbackup)

## **Projects**

I'm an avid open source contributor. Some of the projects that I contribute to/maintain/develop:

- GHCJS (contributor) JavaScript backend for GHC
- *K Framework (contributor)* Executable semantic framework for defining programming languages
- *PureScript (contributor)* A small strongly, statically typed language that compiles to JavaScript
- *language-lua (owner)* Lua 5.2 lexer, parser and pretty-printer for Haskell
- *hslua (maintainer and developer)* Lua interpreter interface for Haskell
- *GHC (contributor)* A state-of-the-art, open source, compiler and interactive environment for the functional language Haskell

Projects I contributed to in the past:

- *Fay* compiler from a subset of Haskell to JavaScript
- LLVM Haskell bindings
- SDL2 Haskell bindings
- Rust

# **Experience**

*Indiana University, Programming Languages Group – 2015* 

I'm a PhD student and research assistant, working on various programming languages and Haskell related topics.

Runtime Verification – 2014

4 months. I worked as a software engineer, continued working on K Framework.

Google Summer of Code for Haskell.org organization – 2014

3 months. I implemented some of GHC's profiling features(cost-centers, emulated call stacks) for GHCJS, JavaScript backend for GHC.

Soostone - 2014

3 months. I worked as a Software Engineer (Haskell).

University of Illinois at Urbana-Champaign, Champaign, IL, United States – 2013

3.5-month internship at Formal Systems Laboratory. I worked on K Framework, a rewrite-based executable semantic framework for programming languages, type systems and formal analysis tools.

Özyeğin University, Istanbul, Turkey – 2013

3.5-month internship under supervision of Prof. Baris Aktemur: Developed an interpreter for a statically typed multi-staged programming language with subtyping, row polymorphism and type inference. Performed extensive literature reading. Implemented in OCaml.

OBSS, Istanbul, Turkey – 2012

3.5-month internship: I developed a simple static analysis tool for GrayMound, a Java framework based on J2EE and an Eclipse plugin.

*TUBITAK (The Scientific and Technological Research Council of Turkey), Kocaeli, Turkey – 2010* 4-week internship: Developed the web front-end for PiSi, package manager of Pardus(a GNU/Linux distribution from TUBITAK).