#### Konstantinos Kallas

Contact

Address: Mpoumpoulinas 27, Dionisos, Greece, 14576

**Information** Phone: +30 6957814666

Email: konstantinos.kallas@hotmail.com

Github: angelhof

Website: angelhof.github.io

Education

University of Pennsylvania

September 2018 – present

Computer and Information Science, PhD student

**Eight Summer School on Formal Techniques** 

May 2018

Menlo College, Atherton, CA Organised by SRI International

National Technical University of Athens

October 2012 - February 2018

Electrical and Computer Engineering, Diploma

Thesis: "HiPErJiT: A Profile-Driven Just-in-Time Compiler for Erlang"

Advisor: Prof. Kostis Sagonas

Universita degli Studi dell'Aquila

February 2015 - July 2015

Computer Science, Erasmus Mobility Programme

Working Experience Google Summer of Code Student

May 2017 - September 2017

Worked with BEAM Community to extend the ejabberd open source project.

Implemented support for the "Let's Encrypt" ACME certificate acquiring protocol.

Big Data Application Developer

June 2016 - September 2016

Everis, Barcelona, Spain

Internship at the Big Data Center of Excellence.

Developed Big Data Applications using a plethora of tools in the Hadoop ecosystem.

Teaching Experience Lab Assistant, National Technical University of Athens

Fall 2017

Course: Introduction to Programming, 1st semester

Professors: S. Zachos, N. Papaspyrou, V. Kantere, and P. Potikas

Honors and Awards **Programming Competitions** 

2015-2018

Participation in many programming competitions. Notable examples: ICFP Programming Contest 2018 (Lightning) 10th out of 91 teams,

IEEE Xtreme 2017 Top 5% and 3rd in Greece, IEEE Xtreme 2016 Top 10%

Heterogenous Computing Student Challenge Certificate

2017

HiPEAC CSW, Zagreb, Croatia

Optimizing GPU implementation of the K-means algorithm (NTUA-team)

Supervision: Prof. Georgios Goumas

**EESTech Challenge** 

2017

Supervised Machine Learning Hackathon

Joint 1st place among 40 teams.

The Great Moment of Education Scholarship from Eurobank EFG 2012 Achieving the highest rank in national qualifications exams in Dionisos high school.

9th European Union Science Olympiad

2011

Team-based science competition in Biology, Chemistry, and Physics.

1st place in local round and 3rd place in national round.

## Mathematical Competition, Hellenic Mathematical Society

Mathematical competition for high school students.

Distinction in the 1st and 2nd local round.

## Selected University Projects

## Edsger Compiler (7)

Spring 2016

Course: Compilers – Professors: K. Sagonas and N. Papaspyrou Complete compiler for Edsger (a C-like educational language).

Implemented a lexer, a parser, a semantic analysis pass and a transpiler to LLVM-IR.

## Chord Protocol Implementation ()

Fall 2016

Course: Distributed Systems - Professor: N. Koziris

Implemented two versions of the Chord protocol, one with sequential replica consistency and one with eventual replica consistency.

Tested whether the replicated values satisfied the constraints set by the consistency protocols.

#### Song Emotion Classifier (7)

Fall 2016

Course: Pattern Recognition - Professor: A. Potamianos

Worked on an automatic emotion recognition system, dedicated to classifying the emotional content of songs.

The system extracted the essential features from the songs and trained an SVM classifier.

# Computer Experience

## **Programming Languages:**

Erlang, Haskell, Python, Coq, C, Scala, SML, Agda, Javascript, Matlab, Java, SQL

#### Operating Systems:

Extensive experience on the Linux OS and Linux Kernel Programming.

## Hadoop:

Deep understanding of the Hadoop Ecosystem as well as hands on experience.

#### Typesetting:

Experience using LATEX.

#### Languages

Greek (Native), English (C2), Italian (C1), German (B2)

#### Interests

#### Pastimes:

Guitar playing and music in general, Board Games, Table Tennis, Cinema, Travelling

## **Programming:**

Working on several hobby and open source projects.

#### Memberships:

IEEE Member, ESN Member

2010