

# Louis Kounios

DEVOPS ENGINEER

Larnaca, Cyprus

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*Some people, when confronted with a problem, think “I know, I’ll use regular expressions.”  
Now they have two problems.  
—Jamie Zawinski*

## Summary

DevOps Engineer with experience in Kubernetes, Terraform, Ansible, Docker and Python. Computer Science post-graduate with a background of specialisations in optimisation, evolutionary computation and artificial intelligence. Always looking for the next problem to solve and excited at the prospect of learning new technologies.

## Skills

<b>DevOps</b>	Kubernetes, Docker, Ansible, Terraform, CI / CD
<b>Cloud Providers</b>	AWS, Azure
<b>Programming</b>	Python, Bash Scripting
<b>Back-end</b>	FastAPI, Flask, gRPC, protobuf
<b>General</b>	Linux, git
<b>Scientific Computing</b>	NumPy, SciPy, Matplotlib
<b>Languages</b>	Greek, English

## Experience

### Dataflow Security

Remote

DEVSECOPS & SYSTEMS ENGINEER

Jan 2022 – present

- Redacted.

### OVO Automotive

Remote

DEVOPS ENGINEER

Mar 2019 – Jul 2021

- Administered Kubernetes clusters on rented dedicated servers and cloud providers (AWS, Azure).
- Developed dashboards and APIs (Python) for managing the complete lifecycle of Android virtual machines and their storage (Longhorn) running on Kubernetes clusters.
- Developed and maintained Ansible collections and playbooks for configuring different types of servers across multiple data centers.
- Configured CI / CD pipelines using Gitlab autoscaling runners on AWS.

### Munity, Inc.

Remote

SOFTWARE ENGINEER

Jul 2017 – Oct 2018

- Developed a highly parameterised Jenkins QA pipeline that measured the performance and bandwidth usage of Munity technology on networked hardware residing in remote locations. Reports were automatically generated in Markdown, HTML and PDF (LaTeX) formats.
- Developed and maintained Ansible playbooks and roles that were used to deploy and configure servers used internally for development and testing, or delivered to Munity partners.
- Developed a web application used to create and manage virtualised Android devices (Python, Flask, SQLAlchemy, Docker, Ansible, PostgreSQL, Bash) used internally and delivered to Munity partners.
- Developed Docker images which were used to containerise Android virtual machines (Docker, Bash, Python, QEMU).

### University of Southampton

Southampton, United Kingdom

PHD STUDENT

Sept 2013 – Nov 2018

- Performed four years of funded research in pursuit of PhD before exiting program.
- Implemented evolutionary algorithms and models of the evolutionary process used to perform original research in the areas of evolution, optimisation and machine learning (Python, NumPy, SciPy, Matplotlib, MATLAB).
- Designed and performed research; analysed data; authored annual reports (LaTeX, TikZ, PGFPlots).

## University of Southampton

Southampton, United Kingdom

DEMONSTRATOR (PART TIME)

Dec 2013 – Jan 2016

- Graded assignments and final examinations of under-graduate and post-graduate Computer Science students.

## UNIC Online

Remote from Intercollege

SOFTWARE ENGINEER

Jan 2012 – Aug 2012

- Installed, configured and maintained the Moodle Virtual Learning Environment platform on Amazon Web Services for the delivery of online degrees with UK Universities.

## Intercollege

Larnaca, Cyprus

SENIOR IT SUPPORT

Jun 2010 – Jan 2012

- Tested, verified and certified critical online learning environments used within franchised collaborative agreement with UK universities.
- Administered 85 staff accounts and approximately 600 student accounts, and ensured that the Intercollege computer networks were running smoothly.

## Intercollege

Larnaca, Cyprus

LAB TECHNICIAN

May 2009 – May 2010

- Maintained computer lab equipment.
- Supported staff and students with general hardware- and software-related issues.

# Education

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## University of Southampton

Southampton, United Kingdom

MPhil in Computer Science

- Implemented evolutionary algorithms and models of the evolutionary process used to perform original research in the areas of evolution, optimisation and machine learning.
- Thesis title: *The Evolution of Evolvability: How Evolution Learns to Evolve*.

## University of Southampton

Southampton, United Kingdom

MSc in Artificial Intelligence

- Graduated with distinction.
- Thesis title: *The Ability of Differential Evolution Principles and Multi-Parent Crossover Techniques to Solve Random-Linkage Modular Problems*.

## Intercollege

Larnaca, Cyprus

BSc in Computer Science

- Graduated with highest honour (*Summa Cum Laude*).
- Awarded scholarship at end of freshman year.
- Thesis title: *Agent-Based Problem Solving Using Differential Evolution on Real-Valued Problems*.

# Publications

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Kounios, L. Clune, J. Kouvaris, K. Wagner, G. P. Pavlicev, M. Weinreich, D. M. and Watson, R. A. 2016. *Resolving the paradox of evolvability with learning theory: How evolution learns to improve evolvability on rugged fitness landscapes*. arXiv preprint arXiv:1612.05955.

Kouvaris, K. Clune, J. Kounios, L. Brede, M. and Watson, R. A. 2017. *How evolution learns to generalise: Using the principles of learning theory to understand the evolution of developmental organisation*. PLoS computational biology, 13(4), p.e1005358.

Watson, R. A. Mills, R. Buckley, C.L., Kouvaris, K. Jackson, A. Powers, S. T. Cox, C. Tudge, S. Davies, A. Kounios, L. and Power, D. 2016. *Evolutionary connectionism: algorithmic principles underlying the evolution of biological organisation in evo-devo, evo-eco and evolutionary transitions*. Evolutionary biology, 43(4), pp.553-581.