# Thea Ullegaard Kjeldsmark

# Education

# University of California, Irvine

Masters of Science in Computer Science (MSCS)

Irvine, USA

Starting Fall 2023

# IT University of Copenhagen

Bachelor of Science in Software Development, GPA: 10.79/12.0

Copenhagen, Denmark Aug 2020 - Jun 2023

• Study abroad semester Spring 2022: American University in Cairo, GPA 3.94/4.0

#### Minerva University

San Francisco and Seoul

Part of Bachelor's: Computational and Social Sciences, GPA: 4.0/4.0

Aug 2018 - Dec 2019

• Transferred to ITU to pursue computer science.

# Industry Experience

Microsoft Dublin, Ireland

Software Engineer Intern

Jun 2023 - Now

Jun 2022 - Aug 2022

• Adding inline student email verification to Office checkout using C# and React.

Software Engineer Intern

• Developed a Microsoft Teams app that visualizes how accessible a company's Office files are.

Wrote TypeScript and React to filter pipeline data and display it via Microsoft Teams components.

J.P. Morgan Glasgow, United Kingdom

Software Engineer Intern

Jun 2021 - Aug 2021

- Designed and implemented a Java framework for translating user-inputted GraphQL queries into SPARQL queries.
- Expanded the framework to include handling of nested groups, several required predicates, and complex naming.

Tradimo Interactive Copenhagen and Remote

Data Engineer Intern

Jun 2019 - Feb 2020

- Developed a website tracking system through JavaScript, Google Tag Manager, and Google Analytics.
- Created a marketing dashboard in Google Data Studio via APIs and JavaScript to track various KPIs.

### Teaching Experience

# IT University of Copenhagen

Copenhagen, Denmark

Teaching Assistant, Study Lab (Drop-In Tutoring)

Jan 2023 - May 2023

• Helped 2nd-semester with the courses "Algorithms and Data Structures", "Web Programming", and "Map of Denmark".

Teaching Assistant, Distributed Systems (160 students)

Aug 2022 - Dec 2022

• Assisted students with distributed systems theory and graded Go implementations together with five other TAs.

Teaching Assistant, Introductory Programming (150 students)

Aug 2021 - Dec 2021

• Assisted students with Java object-oriented programming exercises and graded assignments together with eight other TAs.

#### Minerva University

San Francisco, USA

Writing Peer Tutor

Sep 2018 - Apr 2019

• Selected among 160 students to a team of seven who helped students with their English writing via workshops and 1:1s.

#### Awards and Achievements

# Thanks to Scandinavia

2023

Scholar

• Selected as one of two Danish scholars for graduate tuition scholarship (administered by Fulbright Denmark).

#### Danish National Cybersecurity Competition (CTF)

Spring 2021

Participant

• Qualified for the national competition by passing the online qualification and then placing in the top 25 at the regional competition (17th out of 34 for age and region).

# HackIllinois, University of Illinois Urbana-Champaign

Winter 2021

Open Source Fellow (Remote)

- Contributed to Python open source projects ("inflect" and "setuptools") while being mentored by professionals.
- Selected as one of nine outstanding contributors from 46 participants based on contributions and mentor feedback.

# **Projects**

### Improving Haaukins (open-source Capture the Flag platform) using Kubernetes | Go, Kubernetes, Docker

- Developed a Go program that handles CTF users and challenges in Kubernetes and allows users to connect to challenges via VPN (Wireguard) or a Docker Kali in their browser (Apache Guacamole).
- Set up a Kubernetes cluster from scratch, implemented monitoring, and analyzed performance tests in R.

# Map of Denmark | Java, Python

- Collaborated with a team of four to develop a map application featuring visualization, navigation, and address search.
- Implemented R-Trees for efficient range search and modified graph algorithms to provide proper route planning.
- Performed experiments and Python data analysis to compare R-Tree overflow methods and Dijkstra vs. A\* routing.

#### **Project Bank** | C#, Docker

- Developed a project bank application in C# together with five other students that allows students to search for projects, supervisors to publish projects, and an admin to administer general settings.
- Implemented authorization and authentication policy via Azure AD.

### Technical Skills

Languages: Java, Go, C#, F#, C, R, Python, JavaScript, SQL, GraphQL

Web Technologies: React, TypeScript, HTML/CSS

Tools: Git, Docker, Linux, Kubernetes