

George David Tsitlauri

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About Me

BSc in **Informatics & Telecommunications**, University of Thessaly (DIT/UTH), Greece (2021–2026).

Specialization: **Data Management and Artificial Intelligence**

Member of the Research Laboratory of **Computer Architecture, Compilers and System Security**.

Thesis

Design and implementation of an encrypted instruction set processor (CryptoCPU) on FPGA

Developed a custom cryptographic processor supporting encrypted instructions, focusing on secure execution and hardware-level cryptographic protection. Utilized C++ and MIPS Assembly, with Xilinx Vivado for development and testing on FPGA.

Projects

Advanced Machine Learning Projects

A collection of advanced machine learning projects, including deep learning, and data analysis.

Parallel AES CUDA

Parallel implementation of AES encryption using CUDA.

Weather App Autoscaler

A scalable weather app using Kubernetes, with auto scaling based on load and weather data.

Big Data Spark Taxi

Big data analysis of taxi trips using Apache Spark and Hadoop.

Video Coding for Machines

Video coding techniques optimized for machine learning applications.

Reinforcement Learning Experiments

Experiments and research in reinforcement learning algorithms.

Tourism Data Mining

Data mining and analysis for tourism datasets.

GPBFT Consensus Protocol

Implementation of the GPBFT consensus protocol for distributed systems.

Build a Compiler

Project for building a compiler from scratch.

CCC IR Optimizer

IR code optimizer for the CCC C front end translator.

Egram Student Management System

Student management system for institutions.

Skyrianos

Website about the island of Skyros.

OstrichZooPark

Website for Ostrich Zoo Park basic details and visitor info.

Pavliidi Home E-shop

E-commerce platform built with Next.js and Medusa.js.

Skills

| Programming Languages | Frameworks & Tools | OS | Personal Skills |
|---|--|-------------------|--|
| C, C++, Java, Python, SQL, CUDA, MIPS Assembly, HTML5, CSS3, JavaScript, Typescript | Xilinx Vivado, Docker, Kubernetes, VS Code, Wireshark, Git, VirtualBox, Figma, React, Next.js, Tailwind CSS, Medusa.js | Windows, Linux | Communication, Teamwork, Adaptability, Self-Improvement |

Languages

Greek (Native), Russian (Native), English (B2–ECCE, University of Michigan)