# MATEUSZ STOMPÓR

 • Website | @ E-Mail | □ Phone | □ LinkedIn | • GitHub | • Cracow

## **EDUCATION**

**Jagiellonian University** 

M.Sc. in Computer Science

Faculty of Mathematics and Computer Science

Cracow, Poland Oct 2019 – Nov 2023 Grade 4.32/5

**Jagiellonian University** 

B.Sc. in Computer Science

Faculty of Physics, Astronomy and Applied Computer Science

Cracow, Poland Oct 2015 – July 2018

Full-Time, Mar 2023 - Present

Grade 4.61/5

#### **WORK EXPERIENCE**

MotionVFX Bielsko-Biala, Poland

Senior Software Engineer

• Core developer of mTracker Surface, responsible for porting GPU effects for Apple Metal, developing new features in Objective-C and C++, creating user interfaces

- Architected an anti-piracy licensing system for Design Studio
- Spearheaded modernization of CI pipelines, automating numerous manual processes involved in application publishing
- · Designed robust APIs and Python packages for seamless and direct application deployment
- Introduced a stability-monitoring system for all applications, significantly improving overall reliability
- Conceptualized, designed, and implemented a troubleshooting application that streamlines client issue resolution
- Enhanced application security by reverse engineering cracked binaries and implementing sustainability-focused improvements, as one of the few developers specializing in this area

IBM Cracow, Poland

Principal Software Engineer

Full-Time, April 2022 – Mar 2023

- Developer of Netezza Performance Server (Distributed, Warehouse Engine having over 500 000 lines of C++ code)
- Leading programmer in a team creating a module for parallel reading of remote tables from object storage
- Designer of an automation flow for S3 resources management data mirroring, credentials security, isolation
- Author of numerous performance patches based on analysis from perf, assembly, data flow screening
- Eager mentor Received over 20 recognitions from various team members for engagement and willingness to help
- Presenter of multiple demos showcasing new features or findings from prototypes

Senior Software Engineer

Full-Time, Mar 2019 - Mar 2021

- Designer of an Openshift Operator and upgrade procedure for an application governing hardware
- On-call engineer troubleshooting and resolving problems on production systems over 15 cases solved during periodic weekend standby routines

Software Engineer Part-Time, Mar 2019 – Mar 2021

- Developer of distributed platform manager application governing Cloud Pak For Data System
- Member of an international team, operating in four different timezones
- Initiator and author of BOM (Bill of materials) component redesign, improving correctness and performance
- Creator of numerous automation tools for application deployment, documentation generation

Ailleron Cracow, Poland

iOS Software Engineer I

iOS Intern

Part-Time, Oct 2017 – Jan 2019

- · Author of Ruby-based service meant to provide users of the mobile application with push notifications
- Developer of Ruby-On-Rails backend application
- · Codebase unification initiator reducing several active development branches to only one

Part-Time. Jul 2017 - Oct 2017

- Author of functionality for dynamic language switching
- Improvements to translation process excel scripting for building files ready to be shipped with an iOS app
- · Author of digital key integration between Assa Abloy Framework and iOS mobile application
- Contributor to an iOS, mobile application for the most luxurious hotels (Lux\*, Atlantis The Palm, Valamar)

## **PROJECTS**

# Porc3lain Engine | GitHub

A 3D engine built from scratch with the use of Swift and Metal. Among other functionalities capable of object loading, scene management, performing rigid body animations as well as skeletal

#### Chess | GitHub

A game created on top of the Engine I developed. Complete in terms of functionality - detects checks, stalemates, and checkmates. Implements the whole set of moves including *el passant*, pawn promotion, castling

# **RHCE Materials** | *GitHub#1 GitHub#2*

A project consisting of two repositories - exercises with answers preparing for EX294 exam and multi-machine environment to ensure repetitive results among all users. Helped more than 100 people worldwide in preparations for their exams

## AsyncTCP | GitHub

Objective-C library created to abstract TCP communication. Built in an object-oriented fashion with focus on multithreading. Designed with testability in mind. Used in production - by an application for sauna controlling available on AppStore

# Flappy Bird | GitHub

A Flappy Bird clone, pyGame-based

#### **Linked List** | GitHub

A cross-platform library that provides a generic implementation of a linked list. Written in x86-64 assembly with interface exposed to C/C++. Tested in a containerized environment against algorithms correctness and memory violations - including leaks

## **CERTIFICATES**

Red Hat Certified Architect Infrastructure specialist	Feb 2023
Red Hat Certified Engineer  Ansible 2.8, Red Hat Enterprise Linux 8	Oct 2021
Red Hat Certified System Administrator Red Hat Enterprise Linux 8	Jul 2021
AWARDS & ACHIEVEMENTS	
Chancellor's Scholarship 7th best student (111 in total)	2017
SKILLS & STACK	

#### SKILLS & STACK

**Programming:** C, C++17, Objective-C, Swift, Python, SQL, Ruby, Assembly (x86)

Graphics: Metal, OpenGL

Technologies: Git, Openshift, Ansible, Docker, Rest, SwiftLint, Codecov, RegEx, Operator SDK

**Testing:** GoogleTest, pytest, XCTest, Combine, SwiftUI

CI: TravisCI, GitHub Actions, GitLab CI/CD, Bitbucket Pipelines

Developer Tools: XCode, CLion, VS Code, PyCharm

Troubleshooting toolset: gdb, ldd, perf, objdump, Apple instruments, Valgrind, RenderDoc

Reverse Engineering: Binary Ninja, otool

Code Corectness: swiftlint, clang-tidy, clang-formatter, yamllint

Design: StarUML, draw.io, Xmind

Organization: Jira, Zenhub, GitHub, Notion

**Operating Systems:** macOS, Linux

Languages: Polish (Native), English (Professional)