

Lis R. Dautaj

SOFTWARE ENGINEER

CONTACT

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LANGUAGES

Albanian - Native Language

English - Fluent

Japanese - Working Proficiency

HOBBIES

Reading

Movies & TV Shows

Drawing & Sketching

SKILLS

C/C++



Python



Java/C#



MongoDB



MATLab



WORK EXPERIENCE

SOFTWARE ENGINEER EMORY DEPARTMENT OF COMPUTER SCIENCE

January 2023 - Present

- Work with faculty from the Department of Computer Science and the Department of Mathematics in developing academic and research software projects.
- Work on the LifeV project, developed in C++, making use of Docker containers and Kubernetes.
- Manage the Front and Back-End for the Emora Mobile app project written in Flutter, Python, MongoDB, Flask and NginX
- Manage the Front-End and Back-End for both the Mathematics and Computer Science departments' official web pages.
- Maintain the department's GPU servers and provide support for its users.
- Supervise and train undergraduate student developers.

STUDENT SOFTWARE DEVELOPER EMORY DEPARTMENT OF COMPUTER SCIENCE

August 2022 - December 2022

- Assisted the Technical Staff of the department in developing the LifeV software, a library constructed using C++ to precisely solve partial differential equations, to be used in areas like cardiovascular mathematics.
- Helped develop a mobile app using Flutter and Dart.
- Learned to use Docker to create containers for faster software deployment.

3D VISUALIZATION LAB ASSISTANT EMORY CENTER FOR DIGITAL SCHOLARSHIP

August 2020 - December 2022

- Modelled, sculpted and textured 3D assets such as houses from real life reference, to be used for virtual reality applications or documentary videos.
- Worked on reducing 3D asset file sizes for optimized implementation in VR software, whilst also retaining photorealistic detail.
- Learned more about the Unity Game Engine and scripting in C# for VR applications.

MODELLING ACCELERATOR TRAINEE SOUTHEAST CENTER FOR MATHEMATICS

June 2021 - July 2021

- Implemented an agent-based model of Varroa mite infestation in honeybee hives based on biological research, mathematical modeling, and parameter experimentation.
- Attended weekly lectures, showcases, and group meetings to learn more about agent-based modeling (ABM), current research applications of ABM, and NetLogo coding throughout six weeks.

EDUCATION

BS COMPUTER SCIENCE/MATHEMATICS EMORY UNIVERSITY

August 2019 - December 2022

- Relevant Coursework: Computerized Graphics and CAD, Linear Optimization, Numerical Analysis, Abstract Algebra, Data Structures and Algorithms, Computer Architecture/Machine Level Programming, Introduction to Scrum, Database Systems, Systems Programming, Operating Systems, Theory of Computing, Artificial Intelligence and Machine Learning

COMMUNICATIONS

ATLANTA STUDIES SYMPOSIUM GEORGIA STATE UNIVERSITY

May 2022

- Speaker at the symposium on the topic "Atlanta in the 1920s – Making the Past come alive in the OpenWorld Atlanta Project", specifically presenting on the 3D Modelling of Cabbagetown

PROJECTS

LIFEV

August 2022 - Present

- Library constructed using C++ to precisely solve partial differential equations for fluid dynamics, like the Navier-Stokes equations. Learned to use Docker containers for faster software deployment, as well as Git methodologies, particularly GitHub.

HOCA OPERATING SYSTEM

January 2022 - May 2022

- Created my own operating system as part of the CS 452 OS class from scratch using C. Gained a deeper understanding about how operating systems work.

ENVISIONING BAROQUE ROME

January 2022 - December 2022

- Assisted with creating a Virtual Reality website which aims to showcase Rome in the 16th century. Created 3D assets and scripts to be used in the Unity Game Engine.

3D RENDERING ENGINE

January 2022 - May 2022

- Created my own rendering engine as part of a personal project using C#. Functionalities included mesh imports, lighting and texturing.