Tomas Stegemann

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Education

Bachelor of Computer Science, expected May 2024
College of Science and Engineering, University of Minnesota-Twin Cities, Minneapolis, MN
Minor in Interdisciplinary Design

Notable Coursework

- Algorithms and Data Structures, Formal Languages and Automata Theory (Fall 2022)
- Software Design and Development (Fall 2022)
- Functional Programming, Linear Algebra (Spring 2022)
- Machine Architecture and Organization, Discrete Mathematics (Fall 2021)

Work Experience

Software Development Intern, Advaita Bioinformatics Corporation (Summer 2019)

- Worked on genetic pathway analysis features for Advaita's iPathwayGuide software using Java, JavaScript, Python, R, and PostgreSQL
- Performed collaborative software development tasks under AdvaitaBio's lead software developer
- Made use of software development tools and processes such as version control with Bitbucket (Git) and issue tracking with Jira

Prep and Line Cook, Northside Grill (Summer 2021)

- Handled myriad kitchen responsibilities on-demand, as directed by the head cook
- Primarily responsible for preparing ingredients and cooking on the line

Undergraduate Teaching Assistant, Introduction to Data Structures and Algorithms (Fall 2022)

- Oversaw labs and projects, guided students and assessed their performance
- Held office hours, helped students with coursework and other challenges

Skills

Programs and Tools

- Unity (2D, 3D), Unreal Engine 4, OpenGL, Blender
- Visual Studio, RenderDoc, CMake
- Git (GitHub, Bitbucket, command line), Jira, Trello

Programming Languages

- Most Used: C, C#, Python
- Past Experience: C++, Java, OCaml, Swift, JavaScript, R, PostgreSQL, GLSL

Recent Projects

- Arpeggio (2021, Unity 2D and C#) - Ability system, equipment system, input handling system
- Catalogue (2022, Unity 2D and C#) - Emphasis on game-feel driven by sturdier and more elegant systems. Continued improvements with input handling, FSM-driven behaviour, better use of composition, etc.
- Devil Queller (2022, Unity3D and C#) - 3D action combat, 3D animation and particles, shader work, navmesher WIP
- Various Engine-Level Programming (Present, C/C++, Swift) - OpenGL, Metal, ECS architecture, core techniques

Leadership and Activities

- Officer (Programming Mentor), University of Minnesota Video Game Development Club (Fall 2022)

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