Keegan Woodburn

Full Stack Software Engineer

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Experience

Software Engineer Intern @ Bentley Systems, Inc.
(TypeScript • React • C# • .NET • Azure • Git)

May 2022 - Present // Pittsburgh, PA

- ▷ Created an automated test data maintenance system to assist in project data management.
- ▷ Primary developer of ProjectWise SAM, an infrastructure software for managing construction assets.
- ▷ Produced front and back-end unit and integration tests alongside application development.

Tech Assistant @ Grove City College
(TypeScript • Angular • HTML • Ionic • Sass • Git)

September 2021 - April 2022 // Grove City PA

- ▷ Primary developer of RedSnail, software for all the necessary aspects of running a mailroom.
- ▷ Sole developer of analytics page for package data, which led to a 25% increase in workflow efficiency.

Software Engineer Intern @ Johns Hopkins University Applied Physics Lab
(Python • Pandas • GitLab • Git)

May - October 2021 // Laurel, MD

- ▷ Designed a ground-up framework (nicknamed QAS) for parsing and scheduling job data.
- ▷ Researched and developed novel methods for handling time-sensitive jobs with AI Planning and Scheduling.
- ▷ Simulated and presented automated tasks using QAS, allowing for further development in regions of naval automation.

Projects

3D Game of Life // Team Project
(Java • JavaFX • HTML • CSS)

- ▷ A desktop application for visualizing simulations of 3D cellular automata.
- ▷ Primary developer and designer of an intuitive interface for mapping 2D inputs to a 3D space.
- ▷ Produced file management system for maintaining and storing simulations and 3D templates.

RedSnail // Team Project
(TypeScript • Angular • Ionic • HTML • Sass • Git)

- ▷ An end-to-end web application for managing everyday tasks in a mailroom.
- ▷ Sole developer of package data analytics page, an intuitive way of viewing many aspects of past package data.
- ▷ Primary developer of package-user verification page, which led to a 20% reduction in student wait-time.

SudokuO // Team Project
(Python • Pandas • NumPy • Git)

- ▷ A research project analyzing and displaying different sudoku solving algorithms such as AC-3, Constraint Programming, Genetic Search, Harmonic Search, and others.
- ▷ Led team of three in researching, implementing, and displaying multiple algorithms.
- ▷ Developed heuristics and compound algorithms for further time analysis and comparison of other algorithms.
- ▷ Designed logic framework for managing and manipulating sudoku board.

Education

B.Sc. in Computer Science
Grove City College (ABET Accredited)

August 2020 - May 2024 // Grove City, PA

- ▷ Minor in AI/Machine Learning
- ▷ Minor in Data Science

Skills

Programming Languages

Java • Python • C • C++ • C# • SQL • JavaScript (ES6) • TypeScript • HTML5 • CSS/Sass • MATLAB

Libraries & Frameworks

React • Angular • Ionic • Node.js • JUnit • Puppeteer • Jest • Mocha • Pandas • NumPy • PySpark • JavaFX • Hadoop

Tools & Platforms

Git • Azure • Scrum • Jira • Linux • Apache Spark • Apache Pig • BigQuery • Bigtable • Google Cloud • pgAdmin • MySQL

Relevant Coursework

Core Classes

Programming 1 and 2 (Java) • Data Structures & Algorithms • Computer Architecture & Organization (C++) • Parallel Computing (C)

Advanced Classes

Software Engineering • Computer Security • Theory of Algorithms • Automata Theory • Operating Systems

AI, Machine Learning, Datascience

Artificial Intelligence • Machine Learning • Database Management Systems (MySQL) • • Intro to Big Data • Statistical Methods 1 • Statistical Methods 2

Other

Achievements

Boy Scout 2012 – 2020 // 2020 Eagle Scout Led a team of 30 people in constructing a public archery range in the span of a year.

Activities

Rollerblading • archery • calisthenics • swing dancing • baking • drawing smiley faces