

# Toby Frick

Software Developer

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## EDUCATION

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**Grinnell College**

*Bachelor of Arts in Computer Science*

2020-2024

GPA 3.8

## WORK EXPERIENCE

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**Epic Systems** - Software Developer Intern

June 2023 – August 2023

*iOS Development, Rapid Iterative Design, MVC Architecture*

- Developed an iOS application to increase operating utilization in hospitals worldwide
- Gained proficiency in user-centered rapid iterative design alongside a UX team
- “This is the best intern project I’ve seen” – A leading member of the surgical team

**Grinnell College** - Evening Tutor and Mentor

February 2022 – Present

*Technical Communication, Data Structures and Algorithms*

- Built excellent technical communication skills explaining complex concepts intuitively
- Utilized guided questioning strategies to enhance student learning outcomes
- Most positively reviewed computer science tutor in 2022

## PROJECTS

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**Chess Board Piece Location and Identification**

*Machine Learning, Transfer Learning, Image Homography, Correlation Filtering*

- Employed computer vision techniques to identify the position of chess board images
- Applied transfer learning to adapt a pretrained CNN for chess piece classification
- Wrote a professional report outlining the implementation and conclusions drawn

**Virtual Data Path and Custom Instruction Set Architecture**

*Assembly Programming, Computer Architecture, Computer Organization*

- Designed a virtual data path which supports a 16-bit custom instruction set architecture
- Increased knowledge of low-level structure which will inform high level design decisions

**Hue-Doku Colorful Sudoku Android Application**

*App Development, Android Development*

- Android application designed as a twist on the classic Sudoku experience
- Users solve Sudoku puzzles using distinct colors instead of numbers
- Leverages view models and local data storage for a smooth user experience

## SKILLS

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JavaScript, React, SQL Firebase, HTML/CSS, Java, Swift, Python, Git, Xcode, Android Studio, Agile Development, MVC Architecture