Toby Frick

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WORK EXPERIENCE

Software Developer Intern – Epic Systems   *June 2023 – August 2023*
iOS Development, Rapid Iterative Design, MVC Architecture
- Developed an iOS application which presents back-end scheduling data to hospital surgeons in an interactive calendar UI with custom month, week, and day views to increase operating room utilization
  - Soon to be implemented in hospitals worldwide
  - "This is the best intern project I've seen", Jonathan Bousman, Epic Surgical Team Lead
- Gained proficiency in user-centered rapid iterative design alongside a UX team

Computer Science Tutor and Mentor – Grinnell College   *February 2022 – Present*
Technical Communication, Data Structures and Algorithms
- Built technical communication skills intuitively explaining complex programming concepts
- Utilized guided questioning strategies to enhance student learning outcomes as measured by my being awarded the most positively reviewed computer science tutor in 2022

Lifeguard Instructor – Grinnell College   *August 2022 – Present*
Red Cross Lifeguard Instructor Certification, Leadership, Teaching and Training
- Certified to instruct CPR and Lifeguard courses through the Red Cross responsible for ensuring the training of competent lifeguards to ensure patron safety and rapid response in emergency situations
- Develops and instructs monthly in-service training for Grinnell College lifeguards to promote patron safety and support a collaborative work environment

EDUCATION

Grinnell College – Bachelor of Arts in Computer Science, 2024   *GPA 3.8*
Relevant Coursework: Software Development, Computer Organization and Architecture, Computer Vision, Text Mining for Artificial Intelligence, Analysis of Algorithms, Computer Networks, Linear Algebra

PROJECTS

Chess Board Piece Location and Identification
Machine Learning, Transfer Learning, Image Homography, Correlation Filtering
- Employed computer vision techniques to identify board position in chess images
- Converted linear algebra homography equations to perform an affine transformation on chess board images to obtain 2-d board coordinates
- Utilized transfer learning to adapt a pretrained CNN for chess piece classification

Full Stack E-Commerce Website
Full Stack Web Development, Django, React, SQL, RESTful API, Python, Javascript
- Developing an online storefront using a Django backend and React frontend
- Leveraging Django's REST framework for efficient data transfer across the software stack
- Implements CSRF token sending to ensure safety from CSRF attempts
- Reads and writes cookies to the browser for persistent user data across sessions

SKILLS

Languages, Software, & Methodologies: Java, JavaScript, HTML/CSS, Swift, Python, SQL, C, Assembly, Scheme, MATLAB, React, Django, Xcode, Android Studio, Arduino, Raspberry Pi, Firebase, Git, Agile Development, MVC Architecture
Extracurricular: Diver for Grinnell College Men's Dive Team, PADI Certified Scuba Diver, French Horn Player