

Ethan Voth

Website: ethanvoth.com | GitHub: github.com/evoth | Email: ethanvoth7@gmail.com

EDUCATION

University of Central Florida, Burnett Honors College (August 2021 – May 2025)

Computer Science Major, 4.0 GPA

- Awarded Benacquisto Scholarship as a National Merit Scholar
- Completed coursework in Object Oriented Programming, Data Structures and Algorithms, Programming in C, Discrete Structures, Statistics, and Calculus I-III Mathematics

TECHNICAL SKILLS

Programming Languages: Python, C, C++, Java, JavaScript

Technologies and Frameworks: Git/GitHub, Flutter (Dart), HTML and CSS

WORK EXPERIENCE

Goodwill of Colorado (May 2022 – July 2022)

Donation Center Attendant

- Coordinated with the Donation Center team and with other departments to adapt to changing demand
- Communicated with team members to self-assign tasks and shift roles periodically to maintain efficiency

Colorado School of Mines (June 2021 – August 2021)

Computer Science Internship

- Learned statistics and optimization concepts necessary for an understanding of machine learning
- Gained insight into the research process by reading and editing technical papers

PERSONAL PROJECTS

Schema Notes – Cross-Platform Notes App

Dart (Flutter framework)

- Authenticates users to their account in the Firebase database through Google sign-in or anonymous sign-in
- Utilizes the real-time capabilities of Firebase to continuously sync notes and settings between a user's devices
- Sports a clean, modern interface and supports Android and web using the Dart/Flutter ecosystem

Webbster – Astronomical Image Processing Program

Python (Astropy, scikit-image)

- Aligns multiple FITS images from the NASA JWST using their built-in WCS headers so that they can be layered
- Stretches the contrast of each layer using adaptive histogram equalization to reveal the detail in the raw data
- Colorizes each monochrome layer based on the properties of its NIRCAM filter and blends them into one image

Midi Vision – In-Browser MIDI Visualizer

JavaScript (Tone.js, Canvas API, web workers)

- Parses and plays MIDI files using Tone.js, converting raw MIDI data to sequences of connected lines
- Maximizes performance by periodically pre-rendering lines using an offscreen canvas in a web worker to extend the scrolling buffered images, which are then drawn each frame

COLLEGIATE INVOLVEMENT

UCF ICPC Programming Team Practices (August 2021 – Present)

- Attend the weekly 7-hour practices as a guest, learning algorithms and problem-solving techniques to effectively compete against other guests and team members

UCF Marching Knights (August 2021 – December 2021)

- Played clarinet as part of the 395-member marching band and performed at the 2021 Gasparilla Bowl