

iOS Development

GridPlan - Solo Developer | Released to [App Store](#) January 26, 2021

A minimalist calendar app with beautiful animations and a unique aesthetic.

- Managed data storage with **CloudKit** for saving and loading events.
- Built smooth animations with **MatchedGeometryEffect**.
- Incorporated **MapKit** for location search.

Foster - Solo Developer | Released to [App Store](#) May 31, 2020

A wish list app built in **SwiftUI** that allows users to create, manage, and share wish lists with others via text, email, or social media.

- Integrated the **Firestore API** realtime database for data storage, **Universal Links** for sharing, and user authentication for signup and login.
- Designed a modern **UI/UX** in SwiftUI that supports light and dark mode.
- Added hyperlinks so the user can view gifts via SFSafariViewController.
- Refined based on external beta testing feedback using **TestFlight**.
- Crafted the App Store previews and published to the **App Store**.
- Released several updates to the App Store, version controlled with **Git**.

COVID Chart - Non-Released Project | [Repo](#) available on [GitHub Portfolio](#)

An open source project built in **SwiftUI** to plot the latest COVID-19 statistics. **JSON** data is fetched from **The COVID Tracking Project API**, parsed, and plotted with smooth animations. Data can be filtered based on region, state, and search criteria (positive cases, negative cases, deaths, and more).

- Used **WidgetKit** to display data directly on the home screen with a medium and a large widget.
- Incorporated **UserDefaults** to save the user's filter options for reloading upon launch.

EDUCATION

Bachelor of Science in
Aerospace Engineering
NC State University

SKILLS

Swift - 2 years

SwiftUI UIKit

JSON UI/UX Design

Git (GitHub) Firebase

Teamwork Test Planning

Project Management

Experience

Electro-Mechanical Engineer - Triumph Engine Control Systems | January 2018 - Present

Provide technical support to **troubleshoot** failures as well as **lead development** of new or redesigned hydromechanical pumps/metering units and power steering motors used on aerospace applications.

- **Manage projects** of varying complexity from start to finish and **communicate** progress with leadership.
- Generate and execute **test plans** to troubleshoot field issues, **analyze performance** trends, drive **continuous improvement**, and support prototype development.
- Collaborate as a **multi disciplinary engineer** to resolve issues and develop proactive solutions for pumps, metering units, motors, electrical sensors, test stands, and other hydromechanical devices.
- Analyze test data and build tools using **Excel/VBA** to assist in manufacturing and organization.

Structural Analysis Engineer - QuEST Global | July 2016 - September 2017

Performed structural analysis on turbofan engine components with Finite Element Analysis software (**ANSYS**).

- Built and ran analytical models, **debugged** convergence issues, **generated scripts** to modify raw data files (**Perl**, Excel), analyzed results, and communicated conclusions in technical reports.

Hobbies

Reading, drawing, running, getting hurt, not running anymore, cooking, eating, and coffee.