

# Abhinav Pillai

US Citizen | abhinavpillai04@gmail.com | (405)-370-5543 | LinkedIn: [www.linkedin.com/in/nav-pil/](https://www.linkedin.com/in/nav-pil/) | GitHub: NavPilDev

## EDUCATION

### University of Oklahoma

Norman, Oklahoma

B.S. in Computer Science

Expected Graduation, May 2026

- o **Concentrations:** Software Engineering
- o **GPA:** 3.1/4.0
- o **Related Coursework:** Data Structures & Algorithms, Computer Organization, Compiler Construction, Operating Systems, Theory of Computation, Algorithm Analysis, Software Engineering, Artificial Intelligence

## SKILLS

**Programming:** Java, Python, HTML/CSS/JS, SASS, SQL/Docker, Node.js, Next.js, React, React Native, Flask, C++, C#

**Tools:** RSS Feeds, Tailwind, Postman, Windows, VSStudio, Eclipse, Figma, GPT, Git/Github/GitLab, OpenGL, Agile, PhotoShop,

## RELEVANT EXPERIENCE

### Vast Vertex Media

Norman, Oklahoma

Founding Software Engineer Intern

Sep 2024 – Apr 2025

- Subject to N.D.A., no further details are available

### University of Oklahoma: Gallogly College of Engineering

Norman, Oklahoma

Undergraduate Research Intern

Aug 2023 – Dec 2024

- Developed a platform that allows OU Graduate and Alumni Engineering students to connect with university contacts and industry professionals
- Utilized various C++/Python programs and Handshake RSS Feeds to tag students and alumni, from a CRM, into different majors, skills, and locations
- Coordinated with multiple Deans, Admins, University Supervisors, and teams, along with machine learning tools, to find and reach out to University contacts and Industry Professionals

### UFLIP

Oklahoma City, Oklahoma

Software Engineer Intern

Mar 2023 – Nov 2023

- Utilized CSS, SASS, Node.js, JS, HTML, and Figma to create an intuitive and scalable user experience
- Improved website startup times by 60% by replacing synchronous code with asynchronous functions and API calls

## PROJECTS

### Route Runners

Feb 2025

- Developed a React/Next.js web app that integrates ChatGPT and Dijkstra's algorithm to generate and transmit optimized flight paths to a drone based on natural language prompts.
- Designed and built a custom quadcopter drone with a Raspberry Pi interface and iNAV-based autonomous flight system for real-time hazard assessment and evacuation planning
- Implemented a full-stack pipeline to convert drone footage into 3D models using Agisoft MetaShape, enabling WebAR-based augmented reality escape plans for first responders and citizens.

### BenchMusic Playlist Converter

Jan 2024 – May 2024

- Developed a Playlist Converter that gave optional AI recommendations based on converted songs
- Utilized GPT, Spotify/Youtube API, Python, Flask, CSS, JS, Node.js, and Figma to group users' music into genres and generate suggestions based on these groups

### Retro Boomin'

April 2024

- Developed an enjoyable and intuitive education experience using Augmented Reality to showcase retro tech products that have been discontinued
- Utilized Meta Spark Studio, Spline, JS, CSS, HTML, GPT API, and Instagram to allow users to play with and learn about retro tech in real-time using their phones for augmented reality

## ACTIVITIES AND LEADERSHIP

### India Association of Oklahoma

Aug 2016 – Present

- Volunteer
- C# Teacher at Beginner's Coding Bootcamp - 2019

### Hacklahoma

Participated in 2023 - 2025

- Winner for Best Use of AI in Education Award - 2024