Pete Fyffe

🌐 **https://fyffep.github.io/** ✉ **pfyffe@iu.edu**

EDUCATION

Indiana University, Bloomington, IN   Graduate **May 2023**
Master of Science in Computer Science

Indiana University, Indianapolis, IN   August 2019 - **August 2022**
Bachelor of Science in Computer Science   Cumulative GPA: **3.98 / 4.0**

PROJECTS & RESEARCH

Codebase Insights Heatmap — IntelliJ IDE & VSCode Plugin   *October 2021 - May 2022 — Bloomington, IN*
- Provided insights into users' codebases through 6 metrics computed by **Spring Boot** back-end
- Optimized algorithms to analyze Git repositories and identify the most problematic files
- Communicated with team of 7 people by methodically writing meeting notes and scheduling the timeline
- Adapted to frequently changing requirements, then updated documentation and designs accordingly

Healthcare Management System — Full Stack Development   *January 2021 - April 2021 — Bloomington, IN*
- Collaborated with Agile team to develop a back-end server with REST API and front-end user interface
- Self-taught **Spring Boot**, **React**, **Redux**, and **MySQL**, then taught team how to use them
- Documented architecture design and test cases, then adapted to customer feedback

Game Maker Engine — Design Patterns Project   *October 2021 — Bloomington, IN*
- Transformed unusable code into a working game maker after a codebase swap with another team
- Translated ambiguous requirements into an extensible and maintainable application
- Led Agile team to ensure usage of tools including **SonarQube**, **JUnit**, and **Jira**

BatchLayout Graph Visualization — Data Visualization   *September 2019 - December 2019 — Bloomington, IN*
- Built a dynamic, user-friendly web application that plots the coordinates for a graph using only its edges
- Implemented zooming, panning, and vertex removal through **JavaScript** and **D3.js**
- Edited the BatchLayout research paper for understandability

WORK EXPERIENCE

Software Development Intern — Indiana Farm Bureau Insurance   *June 2022 - August 2022 — Indianapolis, IN*
- Modernized 22 e-forms from 2003 .ASP into **ASP.NET C#** in 9 weeks
- Enhanced usability by writing **SQL** queries to extract user data preemptively
- Accelerated work pace by creating a system of templates with which to create web pages

ACTIVITIES

Business Professionals of America Treasurer   *August 2018 - March 2019 — Indianapolis, IN*
- Managed $8,000 as treasurer using Microsoft Excel
- Qualified for state in **C#** Programming and nationals in Fundamental Spreadsheet Applications

TECHNICAL SKILLS

- Object-Oriented Design Patterns (2021)
- Data Structures (2020)
- C# (2022)
- PostgreSQL (2021)
- JavaScript (2021)
- Java (2020)

AWARDS

- Dean's List   *Indiana University Bloomington (2019 - PRESENT)*
- Class of 2019 Valedictorian   *Ben Davis University High School (2019)*
- C# Programming — 1st place award   *Business Professionals of America Regionals (2018)*