

Bret Black (*He/Him*)

blackbret94@gmail.com, (484) 844-9141
www.bretblack.com, www.github.com/blackbret94

OBJECTIVE Seeking a position that will allow me to apply my experiences with and passion for software engineering through development and teaching in games, web apps, and mobile apps.

EDUCATION Lafayette College, Easton, PA May 2016
Bachelor of Science, Computer Science GPA 3.14 Overall, 3.30 In-Major

RELATED SKILLS *Languages and Frameworks:* C, C++, PHP, Java, Node.JS, HTML5/CSS, JavaScript, Vue, Laravel, Python, PostgreSQL, Ruby On Rails
Packages: Unity, Unreal Engine 5, Photon Fusion, Azure, S3, Docker, GameMaker: Studio, Git, WordPress, LaTeX, Bash, Android SDK
Writing: Formal, Scientific, Blogging, Informal, Fictional, Satirical, and Informative
Other: Blender, Photoshop, Studio One, Adobe Premiere, Teaching, Presentation, Leadership, Project Management

PROJECTS AND EXPERIENCE **Game Developer at Vashta Entertainment** 2013 - Present
Philadelphia, PA <https://vashtaentertainment.com>

Co-founded an indie game studio in 2013. Released four games for mobile and PC using Unity and GameMaker. *Trenches of War* has over 2 Million downloads across Android, iOS, Windows, Mac, And Linux and a 4.5-star rating on the Google Play Store.

In this role I served as the only programmer, lead designer, CEO, and contributed to both 2D and 3D artwork.

Independent Contract Game Developer 2023 - Present
Philadelphia, PA

Developed game prototypes through contract work. During this time I created a prototype of a Colony Simulator inspired by Rimworld in Unity Engine and an Action RPG inspired by Path of Exile in Unreal Engine 5.

Software Engineer at American Reading Company 2016 - 2024
Blue Bell, PA

Worked with a curriculum team to design and develop ARC Adventures, a 3D reading practice game in Unity. ARC Adventures integrates with Clever and Classlink SSO services and is powered by a Node.JS server and MySQL database. It is currently available for iOS, Android, and Windows and has thousands of monthly users.

Worked with a small team of software engineers (5-10) to develop and maintain several customer-facing web apps to support teachers and students in classrooms, including SchoolPace, ARC Bookshelf, and SchoolPace Connect. Two Digital Content Coordinators reported to me and assisted in the development and maintenance of several internal tools.

SELECTED PROJECTS

Wizard Cats Tank Battle

2022-Present

Wizard Cats Tank Battle is a team-based multiplayer game that blends the mechanics of classic shooters like "Halo" with MOBAs. It is designed to be accessible to players of all skill levels and ages and focuses on cooperation rather than competition. It is currently in development and has been playtested at MAGFest, TooManyGames, and Dragonsteel.

This game was built in Unity Engine and uses Photon Fusion as a Netcode framework and Microsoft Azure for the backend. For this game I serve as the designer and programmer and have worked with a sound designer, 3D modeler, illustrator, composer, and UI designer.

Harvested

2013-2022

Harvested is a blend of Real Time Strategy and Top Down Shooter. It was released in spring 2021 for PC. During development I conducted playtests at gaming conventions such as MAGFest, TooManyGames, and Gameacon. At Gameacon 2016 it was nominated for "Best Technology." In this project I served as the programmer and lead designer and worked with a composer/sound designer/co-designer and two artists.

Trenches Of War

2013-2018

Trenches of War is a sidescrolling real-time strategy game that was first released in fall 2015. It is available on Android, iOS, PC, Mac, and Linux. It has over 2 million downloads across platforms. In this project I served as the programmer and lead designer. I worked with a sound designer/level designer and an artist.

HOBBIES AND VOLUNTEERING

Performing and Recording Musician

2018 - Present

Perlin Noise

<https://hearperlinnoise.com>

Bandleader and primary songwriter of Perlin Noise, a 5-piece original indie rock band I founded in 2018. We perform regularly in the greater Philadelphia area and have released three self-recorded albums and an EP.

Musical skills include guitar, bass, synth, vocals, recording engineer, and mixing engineer.

Science Fair Judge Judge

2013 - Present

Pennsylvania Junior Academy of Science (PJAS)

Annual judge for high school and middle school science fair since 2013. Participated as a student from 2007-2012.

COURSES

In Computer Science

Introduction To Programming: Computer Gaming, Data Structures and Algorithms, Analysis of Algorithms, Computer Organization, Software Engineering, Computer Networks, Computers and Society, Theory of Computing, Artificial Intelligence, Independent Study: Procedural Generation, Principles of Programming Languages, Operating Systems, Senior Project

Other Noteworthy Courses

Creative Writing, Digital Circuits I, Calculus I II & III, Early Music Ensemble (7 semesters), Introduction To Logic, Discrete Structures, Mathematical Modeling, Spanish I & II, Statistics, Drawing I