Angus Bosmans

Software Engineer

Melbourne, Australia

AngaBlue (https://github.com/AngaBlue) in Angus Bosmans (https://www.linkedin.com/in/angus-bosmans/)

A software engineer with 7 years of industry experience specialising in low-latency experiences, reverse engineering, and machine learning, with expertise in full-stack web apps, command-line tools, and high performance simulations.

WORK EXPERIENCE

Oct 2023 - Current

Founder at BloxBoom

Skills acquired: Next.js | React | Node.js | Prisma | TypeScript | Python | Lua | PostgreSQL | Redis | GraphQL | Sentry | Jenkins

BloxBoom is a digital goods store selling Roblox cosmetic items with instant automated delivery.

- Managed a globally distributed team across 4 time zones to deliver scalable real-time trading automation.
- Established CI/CD, staging environments, process documentation to improve productivity and expedite onboarding.
- Internationalised website into 7 languages including RTL support.

Nov 2024 - Current

High-Performance Compute Team Member at Monash DeepNeuron

Skills acquired: WebGPU Shader Language | Parallel Computing | WebGPU | Python | Torch

A team focused on developing and researching high-performance simulations of neural cellular automata.

- Developed high-performance parallelised neural cellular automata simulations and render shaders in WGSL to create interactive demos.
- Researched and explored novel techniques using neural networks to grow 3D structures with cellular automata.
- Started work on a custom 3D voxel renderer and lighting engine to power client-side visualisations.

Sep 2022 - Dec 2023

Founder at OP.Market

Operated States (Remote) Ithitps://op.market/en

Skills acquired: Next.js | React | Node.js | TypeORM | TypeScript | C++ | MySQL | Tailwind | OCI | NGINX | Cloudflare

OP.Market was a one-of-a-kind online marketplace where users could buy and sell in-game items from Rocket League with our automated trading bots.

- Designed a scalable architecture to support 900,000 users and over 20,000 daily transactions.
- Reverse engineered Rocket League through binary decompilation and intercepting encrypted network traffic to create a full game client replica with a 600 times smaller memory footprint (10MB).
- Developed industry-first technology that allowed us to enter an untapped market resulting in US \$3,000 profit daily.
- Acted as hiring manager and a senior technical advisor to an engineering team of 8.

Jun 2022 - Nov 2023

Software Engineer at Wavedash GmbH

Skills acquired: React Native | TypeScript | Node.js | CI/CD | Docker | GitHub Actions

Wavedash is an established multidisciplinary gaming community and platform for Rocket League, with over 4 million users.

- Transitioned to TypeScript and implemented code-linting with comprehensive documentation to improve code quality and maintainability that led to a 60% decrease in production bugs.
- Developed and deployed a highly resource efficient Discord bot to serve over 1 million users across 10,000 servers.

Oct 2019 - Dec 2023

Lead Developer at RL. Supply LLC

Operation Delaware, United States (Remote) https://anga.blue/portfolio/rl-supply

Skills acquired: React | TypeScript | Redux.js | MySQL | HTML | SCSS/Less/CSS | AWS | NGINX | Cloudflare

RL.Supply was a "get paid to" site with over 100,000 users that allowed users to earn rewards for watching videos, taking part in surveys and playing games.

- Mentored and trained junior developers to build a capable and independent development team.
- Designed software architecture, technology stack.

Jul 2018 - Current

Freelance Software Engineer at AngaBlue

Skills acquired: Problem-Solving | Communication | Customer Relations | Teamwork | Flexibility

As a freelance software developer, I work with clients to develop custom software solutions to meet their business needs. I offer a range of services including web development, mobile app development and scripting however I accept work in a variety of sectors to use as an opportunity to broaden my skill set.

- Develop solutions through active listening and collaboration, ensuring clients' expectations are not only met but expanded upon to achieve mutually beneficial outcomes.
- Explore and implement new technologies to improve the quality and efficiency of future projects.

PROJECTS -

Grocery Shopping Robot

Skills acquired: Python | Torch | OpenCV | ROS | Gazebo | Pathfinding | Machine Learning | YOLO | SOLIDWORKS

A robot that autonomously navigates through a grocery store to pick up items from a shopping list. The robot uses a combination of computer vision, pathfinding and motion modelling to complete the task. The project implements a custom augmentation and dataset generator to provide a robust input to the YOLOv8 model.

InstructAR (Open Source)

https://devpost.com/software/instructar-7wtexo

Skills acquired: C# | Video Livestreaming | Socket.IO | Meta Quest VR | Unity | Hackathon

A realtime augmented reality application that livestreams a user's environment and allows viewers to place virtual objects in the real world from a web interface. This project was built in a team of 3 for the UniHack 2024 competition.

Assembly Formatter (Open Source)

L https://marketplace.visualstudio.com/items?itemName=AngaBlue.asm-formatter

Skills acquired: TypeScript | Visual Studio Code | MIPS Assembly

A Visual Studio Code extension that formats MIPS assembly code by aligning instructions, arguments, comments and cleaning up whitespace. The extension is published to the Visual Studio Marketplace with over 20,000 installs and a 5 star rating.

@angablue/exe (Open Source)

https://www.npmjs.com/package/@angablue/exe

Skills acquired: Node.js | TypeScript | CI/CD

A Node.js package that provides a simple interface to bundle Javascript/TypeScript applications into a single portable Windows executable. The package is published to npm and is actively used in hundreds of projects.

EDUCATION

2021 - 2025

Bachelor of Mechatronics Engineering (Honours) & Arts (In Progress) at Monash University

Major courses: Artificial Intelligence | European Languages (French, Spanish)

AWARDS

Faculty of Engineering Dean's Honour List 2022 at Monash University

Faculty of Engineering Dean's Honour List 2021 at Monash University