Robert Michels

Software Developer & Designer

WORK EXPERIENCE

Clirio, Vancouver — *Software Developer*

May 2021 - March 2024, Fulltime

Clirio offers GIS inspection, documentation, and collaboration in 3D and XR.

- Developed core features of the Clirio View app in C# and Unity, including <u>Scan Views</u>, workspace and observation logic and UI, and map visualization.
- Authored 5+ additional tools such as <u>Scan Shares</u> and <u>Clirio Cloud</u>, using technologies such as Blazor, Three.js, Azure Maps API, and UWP.
- Committed 30% of the total git contributions to the main Clirio View app, and the majority
 of the contributions to numerous client apps, as well as Clirio Cloud.
- Applied UX/UI design skills for iterative prototyping of features in the Clirio product suite.
- Engaged with clients to build custom apps: 2 XR safety training apps, 2 GIS apps.

Sommer Antriebs- und Funktechnik, Germany — Game Developer

November 2015 - December 2015, Internship

Created a marketing mini-game using Blender GE and Python, with Xbox Kinect as input.

PROJECTS

Tourguide — Full-Stack Developer

2024, Personal Project

Tourguide is a Flutter app providing tours with navigation, information, and an AI tour guide.

- Designed UX/UI in <u>Figma</u>, implemented in Flutter, utilizing Firebase and Google API.
- Published web app to Firebase Hosting, Android app to Google Play, CI/CD with GitHub.
- Developed and published the google_maps_custom_marker package to <u>pub.dev</u>.
- Structured back-end, created various cloud functions, added analytics, authentication, etc.

Future Earth — *Game Developer*

September 2020 - December 2020, Simon Fraser University

Future Earth is a VR Unity game, with a mix of combat and economy tree-growing mechanics.

- Led a team of 4, planned and programmed VR interactions with UI and game mechanics.
- Increased frame rate by 80% by optimizing vfx, lighting, geometry, and code.
- Won best overall project in class, achieved 3K+ downloads and 4 star rating on <u>Sidequest</u>.

Harbingers Of Death — Full-Stack Developer

September 2020 - December 2020, Simon Fraser University

Harbingers Of Death is a LAMP stack website that compiles historic superstitions about death.

- Responsible for content pages, account modals and search using MVC pattern and AJAX.
- Planned MySQL database structure, PHP data interactions, and set up backend interface.

Amae - UX / UI Designer

May 2020 - August 2020, Simon Fraser University

Amae is an interactive UI prototype and product design or a parenting app.

- Led a team of 5 designers, designed the UX and UI with a user-goal-focused approach.
- Guided design with personas, flowcharts, wireframes, and user journeys.

Surrey, BC, Canada

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SKILLS

Programming Languages:

C#, PHP, Dart, HTML5, CSS3, Sass, JavaScript, Java, Python

Frameworks:

.NET, ASP.NET, Blazor, UWP, Flutter, Android, Unity XRI, MRTK3, Three.JS, D3.JS, Tailwind, OAuth

Development Tools:

Unity, Git, Jira, Azure, Firebase, Google Cloud API, MySQL, SQLite, CI/CD, Fastlane, GitHub Actions, XCode Cloud, Docker, VirtualBox

Design:

UX/UI, Figma, Adobe CC, IxD, Wireframing, Prototyping, XR

Other:

OOP, MVC, WordPress, GIS, CAD, 3D Modelling, Arduino, 3D Printing, Photogrammetry, Scrum, Agile

EDUCATION

Simon Fraser University — Bachelor of Science

May 2016 - December 2020

Major in Interactive Arts & Technology, with a concentration in Interactive Systems, and a 3.1 GPA.

- Interdisciplinary, collaborative, and hands-on program.
- Courses taken covered software development, design, and digital arts.
- Awards: Dean's Honor Roll

LANGUAGES

Fluent:

English, German

Beginner:

Hungarian, French