

# **InternetMichael Boschwitz**

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## **Education**

Software Engineering

and Creative Design. BIS

Japanese Studies Minor

University of Minnesota   
Minneapolis, MN, USA

## **Languages + Skills**

Natively fluent:

- C, C++, C#, Java, Python,

- JS, HTML, Visual Scripting

- Unity, Unreal, Git/Perforce

(Plus, I make good coffee!)

Conversationally fluent:   
- Japanese

- Godot, SQL, Lua

- Adobe CC/MS Office Suites

Tourist:

- OpenGL, x86, Rust

- 3ds Max, Blender, SFM

## **Activities**

Intermural Volleyball

Jazz Band Drummer

Juggling Club   
Fighting Game Club

## **Ask Me About**

Studying abroad in *Kyoto*

Some of my favorite *Movies*

Almost anything *Musical*   
My love for *Games/Technology*

## **Work Experience**

### **AI Design Intern**, Hangar 13: Summer 2021

* Improved design philosophies for a Multiplayer Open World AAA game.
* Authored new abilities to better express enemy intent and combat roles
* Quickly and efficiently diagnosed and solved complex design problems.
* Evolved classic 2D Bullet Hell mechanics and concepts for 3D gameplay.
* Maintained a high level of quality in an international and fast paced setting.

### **Game Designer**, Rubyshark Games, 2022

* Lead a team in creating numerous distinct enemies, pitch to completion.
* Substantially upgraded existing AI, improving pathfinding and awareness.
* Refined combat flow to improve overall player experience and game feel.
* Diversified intended enemy counterplay for better balance and satisfaction.

### **Teacher Assistant,** University of Minnesota, 2022

* Facilitated expansion of students’ breadth of knowledge in VR/AR.
* Demonstrated proficiency and adaptability to accommodate everyone.
* Left concise and communicative feedback on students’ VR/AR projects

## **Projects**

### **UMN Class Projects Highlights**

|  |  |
| --- | --- |
| Dynamically Adjustable Motion Captured Data Renderer | |
| VR & 3D Interaction Projects | Water Fluid/Pressure Simulations |
| VR Impossible Space Puzzler | Data Visualization Generators |
| Physics & Cloth Simulations | Optimization Projects |
| Bus Scheduling Simulations | Multi-File Interpreters |
| A more comprehensive list of all projects is located on my website. | |

### **Most Recent Video Game Development Club Project**

#### High-Speed Hominids

* Led and oversaw a small team of highly talented game developers.
* Integrated both local splitscreen and online multiplayer functionality.
* Designed and implemented a mechanically deep and robust physics-based movement system, inspired by Source Engine Physics & Titanfall 2.
* Demonstrated multifaceted knowledge in the creation of game systems.

## **Leadership + Awards**

Video Game Development Club VP 　 立命館大学衣笠 SKP

BSA Eagle Scout Tri-M Music Honor Society UMN Dean’s List

Algorithm, Big Data, Classification, Clustering, Data Mining, Data Scientist, Decision Trees, Modeling, Prediction, Forecasting, Quantitative, R, R Programming, SQL, SQL Programming, MySQL, Random Forest, Database, Machine Learning, Overfitting, Regression, Statistics, Training, Testing, AI, Artificial Intelligence, Data Analysis, Data Science, Data Visualization, Quantitative Analysis, Time Series, Data Pipelines, Deep Learning, Neural Network, Autoregression, AR, MA, ARIMA, Bagging, Boosting, Bootstrapping, Confusion Matrix, Cross Validation, Database, Dataset, Dplyr, Factor Analysis, goodness of fit, AIC, Holdout Sample, Holt-Winters, Holt Winters, Impute, K-means, Knn, Regression, Maximum Likelihood, Multivariate Analysis, Pattern Recognition, Polynomial Regression, Data Science, Data Analyst, Data Modeling, Standardized Error, Bayes Theorem, Cross-Validation, Econometrics, Gradient Boosting, quantitative, RStudio, Git, Tableau, PowerBI, Power BI, Python, SuperLearner, Linear Modeling, Polynomial Modeling, Quadratic Modeling, NLP, Natural Language Processing, ML, Machine Learning, Games, Technical, Game Development, Virtualization, Software Development, Prototype Design, User Interface Design, Scripting, Gameplay Design, Computer Science, Game Design, Mentoring, Innovation. Communication Skills, Collaboration, Back End, English Speaking, Vertical slice, Curiosity, Kindness, Positive, Professional, Can-do Attitude,

Artists, Engineers, Product Managers, Collaborate, Game Feature Designs, Monetization Strategies, free-to-play, mobile games. Shipped multiple games, design role, Concept to Live Operations, Tune and balance, Monetization Systems, Qualitative/Quantitative, Play-testing, source control, bug databases, project management suites, creative vision, game features, gameplay systems, challenge, delight, players, driving long-term retention and monetization, Collaborate with the team, phases of development, production and product management, scope, prioritize, high quality levels, Drive live operations, developing plans, deploying, live initiatives, World-class communication skills, with proven ability, effective design documentation, Great teammate who can, engineers, game development, marketers, artists, writers, data scientists, producers, thinkers, doers, professional, publishing, stewards, critically-acclaimed franchises, ongoing development, high-quality raid and dungeon content, creative design, technical implementation, attention to details, balance and polish, translate game concepts, raids, dungeons, encounters, immersive player experience. Play styles, inclusive, increase retention, communicate ideas, cross-functionally, solicit feedback, support, game encounter design, development, polished feature, Coordinate, environment art, level design, narrative, teams, cohesive encounters, story, environmental details, Game development experience, content creation experience, encounter design, level design, Communications skills, comprehensive documentation, collaboratively cross-functionally, Knowledge, understanding, and familiarity, Universe, Lore, Scenario design. Motivate and reward gameplay, strengthen core value, Gameplay First, Leading multidisciplinary teams, Story through gameplay, POIs, gameplay scenario. Communicating design vision, aligning vision, feedback, different player types, iterative gameplay first team, self-motivated, strong work ethic, Leading teams, AAA, open-world, multiplayer, spaces, multiplayer gameplay spaces, partner, from concept to completion, safe space, creativity, multi-disciplines, Experience, Gameplay puzzles. Significant scripting and prototyping experience, first person, third person, passionate game developer, a good human being, new IP, PC/Console, Lead, POI, Game Designer, Drive, Creation, Outstanding, FPS gameplay experiences, survival genre. Ideal candidate, deep understanding, content, gameplay, level design, scenario design, motivate and reward, engagement, Lead Building Designer, vision holder, best-in-class, building, accountability, back-of-the-box feature, building pieces, empower players, microscopic focus, game-feel, interaction, thousands of times, cross-disciplinary, clear goals, holding implementation, complex systems, candor, development of pipelines, compelling content, Pitching game design concepts, detailed manner, strong written and verbal skills, streamlining, iteration cycles, defining goals, curating feedback, action items, launch, live environment, multiple teams, game engines, Unreal, Unity, CryEngine, Source, Blueprint, Lua, Visual Scripting, math, combat design, content design, live ops, or tools development, variety of video game genres and titles, Research, women, members of other under-represented groups, meet every qualification, diverse, inclusive, gameplay features, established framework, implement modifications, reorganizations, extensions, optimizations, existing code base, scheduling feedback, rapid prototyping, iteration, new features, new systems, innovations, industry, debugging skills, Unreal Engine 4, Unreal Engine 5, 3D math skills, Self-motivated, making games, complex technical issues, Good communication skills, 3+ years industry experience, 4+ years industry experience, 6+ years industry experience, 7+ years industry experience, 8+ years industry experience, 9+ years industry experience, Good instincts for game design, fun gameplay, innovative gameplay, multiplayer/online features, creative vision, game features, deploying live initiatives, targeted KPIs, 5+ years of game design experience, card-collecting, card-battling, deck-building games, Bachelor's degree, relevant work experience, Expert-level understanding, game economies, data analysis, back-end environments, self-expression, embraces collaboration, proven leadership experience, strong background in game design, critical thinking, analysis, outstanding people skills, boundless creativity, player experience, emerging industry trends, leading a development team, successful completion, experience shipping, large-scale projects, survival game, Encounter Designer, several years of experience, designing and scripting AI, complicated game world, assessing risks, rapidly prototyping, AI interactions, new encounters, Script and implement, creature behavior, complex game world, Assist other teams, spawning, loot, combatcompelling encounters, Excellent communication, problem-solving skills, Self-motivated, strong initiative, Extensive experience, sound, audio engineering, audio engineer, Game Genres, ARPG/MMORPG, Survival, Action Games, Platform Games, Platformers, Shooters, Fighting, Beat ‘Em Up, Stealth, Survival, Rhythm, Battle Royale, Action-adventure, Survival Horror, Metroid Vania, Metroidvania, Adventure, Text Adventure, Graphic Adventure, Visual Novels, Interactive Movie, Real-time 3D Adventures, Puzzle, Breakout clone game, Logical game, Physics Game, Coding Game, Trial-and-Error, Exploration, Hidden Object, Reveal the Picture, Tile-Matching, Arcade, Traditional Puzzle, Puzzle-Platforming, RPG, Role-playing, Action Role Playing Game, MMORPG, Massively Multiplayer Online Role-playing game, Rougelikes, Rougelite, rouge-like, rouge-lite, Tactical RPG, tactical role-playing game, Sandbox RPG, JRPG, Western, Western RPG, Japanese Role-playing Game, Sandbox, Sandbox Game, Sandbox Role-playing Game, Monster Tamer, FPS RPG, First Person Party-based RPG, Simulation, Construction, Management, Life Simulation, Vehicle Simulation, Sim, Strategy, 4X Game, Artillery Game, RTS, Auto Battler, Auto Chess, MOBA, Multiplayer Online, Battle Arena, ARTS, Action Real Time Strategy, Real-Time Strategy, RTT, Real-time Tactics, Tower Defense, TBS, Turn-based Strategy, TBT, Turn-based Tactics, Wargame, Grand Strategy Wargame, Sports, Racing, Sports game, Competitive, Sports-based Fighting, MMO, Massively Multiplayer Online Game, Board Game, Card Game, Casino Game, Casual Game, digital Collectible Card Game, Gacha Game, Horror Games, Idle Games, Logic Games, Party Games, Photography Games, Programming Games, Social Deduction Games, Trivia Games, Typing Games, Advergame, Art Game, Christian Games, Educational Games, Esports, Exergame, Fitness Game, Personalized Games, Serious Games, Open-world, Open-zone, linear-world, open-world game, metaverse, social space, creative sandbox, First Person, Third Person, Fantasy, Science Fiction, Sci-Fi, Dystopian, Utopian, Future, Past, Alternative, Minigames, ARG, Third-person shooter, 3rd person shooter, 1st person shooter, Escape games, Browser games, Award-winning, Cinematic, Soulsborne, souls-like, dynamic, exclusive, gone gold, immersive, high-octane, procedural generation, ChatGPT, AI Generation, AI Assisted, Artificial Intelligence, Infinite Possibilities, Remastered, remake, retro-inspired, spiritual successor, streamlined, awards, E3, Virtual Reality, Augmented Reality, VR, AR, VRMMO, AR Game,