Nathaniel Knudtson

Game Programmer

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SUMMARY

Passionate game programmer with 4+ years of experience in Unity and Unreal Engine.
Fast learner with strong knowledge of Unity, C#, and C++.
Eager to work within a team and adept in working alone.

CODING SKILLS

- C#
- C++
- Unity Engine
- Unreal Engine
- C
- Java
- HTML
- CSS

SKILLS

- Problem-solving
- Fast Learner
- Lesson planning
- Leadership
- Critical Thinking
- Ability to Work Under Pressure
- Collaboration
- Data Science
- Perforce
- Adobe Illustrator
- Pro Tools

WORK EXPERIENCE

JAN 2023 – PRESENT

Youth Coding Instructor · CodeAdvantage · Chicago, IL

- Teaches coding concepts using Minecraft Education and ScratchJr block coding in after-school classes at partner schools in an engaging and fun learning atmosphere.
- Facilitates hands-on activities that encourage critical thinking, problem-solving, and teamwork skills in students.
- Readjusts lesson material for students who struggle to understand material as initially presented.
- Successfully and independently manages multiple classrooms of up to 15 students, ages 5-12.
- Ensures a safe and productive learning environment through personable engagement.

NOV 2019 – DEC 2022

Data Analyst · XSell Technologies · Chicago, IL

- Supported the development of Artificial Intelligence to increase sales and improve online customer service for clients.
- Analyzed and classified client chat engagements to identify optimization areas in sales dialogue, and compiled data on topic performance for clients.
- Constructed optimized conversational pathways to enhance A.I. engine capabilities.
- Regularly collaborated with the data science team to implement improvements and increase sales.
- Met daily, weekly, and monthly quotas to reach developmental milestones within the company.

MAR 2015 – JUL 2015

Assistant Coding Instructor · PowerUp Tech Academy · Chicago, IL

- Curated Scratch and ScratchJr block coding lessons designed to convey basic programming concepts to young children, ages 5-14.
- Organized and designed comfortable space to allow for the optimal learning environment.
- Spearheaded advertising efforts for a new small-business to engage with the greater community through interpersonal communication and social media involvement.

EDUCATION

DePaul University, Chicago IL – June 2023
Bachelor of Science in Game Design
Dean's List – Autumn 2022-23, Winter 2022-23, Spring 2022-23

Wilbur Wright Community College, Chicago IL – January 2018
Associate of Science in Computer Science

Albert G. Lane Technical High School, Chicago IL – June 2015
High School Diploma
Graduated with Honors

PROJECTS

JUN 2023 – PRESENT
Gallery Glimpse · Lead Programmer · Chicago, IL
Single player, exploration themed game created to innovate developmental
intracranial EEG memory research and gather human neural activity from
epileptic patients.

- Creates virtual space in Unity to provide a naturalistic setting and
  parameters to study human memory formation and recall.
- Incorporates data collection matrices code to track player activity within
  the game.
- Adapts code to interact with research photodiode to sync game play with
  intracranial neural activity.
- Collaborates with Northwestern University's Dynamic Brain Lab to
  adequately integrate cognitive neuroscience concepts into gameplay
  creation.
- Assists in manuscript preparation for scientific journal publication.
- Intends for open-source public release of game and data to allow for
  greater accessibility within the science community.

JUN 2023 – PRESENT
Personal Portfolio Website · Chicago, IL
https://nathanielknudtson.github.io/Website-Portfolio/

- Creates personal portfolio using Javascript, HTML, and CSS, hosted on
  GitHub.
- Designs stylistic aspects to website from ground up with both desktop
  and mobile accessibility.
- Incorporates links to previous game projects
- Showcases artwork and music created for previous projects using
  PixilArt program and Ableton software, respectively.
- Regularly updates to include new projects, artwork, music, and other
  works.

JAN 2023 – JUL 2023
Final Hour · 2D Environment Sprite Artist · Chicago, IL
Single player, top-down isometric adventure game, team of 12.

- Managed production tasks and organization for a small team of artists.
- Designed and created quest item sprites and environment sprites using
  PixilArt program.

- Regularly collaborated with other team leads to incorporate design changes and updates.

JAN 2023 – MAR 2023

Captive Audience · Lead Programmer & Audio Producer · Chicago, IL

Single player, 2D rhythm game, team of 4.
- Led a small team from inception to completion of a full game experience over the span of three months.
- Designed and created gameplay systems and rhythm mechanics for "endless" gameplay using Unity Engine.
- Produced original music for the main gameplay loop using Ableton software.

VOLUNTEER WORK

JUN 2023

Volunteer Event Coordinator · Gamers Universe · Chicago, IL
- Hosted family-oriented gaming sessions for 100+ attendees at Chicago Teen Gaming Guild's "Gamers Universe".
- Interacted with the public through interpersonal relationship skills to engage attendees in couch co-op games.
- Directed equipment setup and breakdown for the event, involving several teams of volunteers over multiple stations.