

ANDREI BORNSTEIN

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SKILLS

Languages — Java, C#, JavaScript/Typescript, Python

Front End — HTML, CSS, Tailwind, Figma

Frameworks — Node.js, React.js, Next.js, NextAuth

Project Management — Git, GitHub, BitBucket, Jira, Agile Methodology

Database — Google Firebase, MongoDB, PostgreSQL, OracleSQL, Prisma ORM, Hibernate ORM

Visualization/Data Science — Tableau, PowerBI, D3.js, R (ggplot2), Matplotlib, Pandas, NumPy

EXPERIENCE

CODING AND GAME DEV INSTRUCTOR

eScout Academy | September 2024 — Present

- Teaching students the fundamentals of computer science with block coding via Code.org and Scratch
- Introduction of students to game design principles with projects and exercises

STEM CAMP INSTRUCTOR

IEEE & Rice University | Try Engineering Summer Camp | June 2024 — July 2024

- Taught students to use Arduino microcontrollers and ArduinoC
- Assisted students with developing prototypes for their culminating design engineering projects

SOFTWARE ENGINEER INTERN

Citizens Bank & WPI | August 2023 — December 2023

- Developed proof-of-concept student loan portal with Next.js and Prisma ORM, leveraging server-side rendering and containerized, in-memory storage
- **Impact:** Demonstrated optimization of tuition payments by integrating FDX APIs and real time visualizations of student loan repayments with Chart.js.
- Delivered academic report addressing business risks, value proposition and presented results to Citizens External Integration Team.

PROJECTS

HOSPITAL NAVIGATION APPLICATION

Brigham & Women's Hospital & WPI | January 2022 — March 2022

- Led the database development sub-team for a hospital navigation application with multiple pathfinding algorithms.
- Created database access methods PostgreSQL and Hibernate ORM.
- **Impact:** Reduced intermittent application load times by over 90% with lazy loaded database queries using Observer and Singleton software patterns.

AQUARIUM REVIEW WEBSITE

Reviews and ratings based on Jellyfish exhibits and overall quality — May 2024

- Developed a website with a map of 123 aquarium locations across the US with the MERN stack (MongoDB, Express.js, React.js, Node.js).
- Implemented reviews for each aquarium and an image upload system using Google Cloud Storage.

AUGMENTED REALITY WALL MEASURING APP

A utility for contractors to allow their customers to measure wall area for quick cost estimates

- Created an AR Android app using ARCore and Kotlin which allows users to place bounding boxes to measure surfaces.
- Automatically detects depth to give estimates of the dimensions of walls.

SOFTWARE

OS — Linux (Kali, Ubuntu), Windows

3D — SOLIDWORKS, Blender, PrusaSlicer, 3DPrinterOS

IDE — Eclipse, IntelliJ, Android Studio, VSCode, Visual Studio

Game Engines — Unity, Godot

EDUCATION

WORCESTER POLYTECHNIC INSTITUTE

B.S. of Computer Science

May 2024 | Worcester, MA

HONORS & AWARDS

WPI PRESIDENTIAL SCHOLARSHIP

Award for High School performance and Extracurricular Involvement | 2020 — 2024.

COURSEWORK

Software Engineering

Database Systems

Object Oriented Analysis & Design

Data Visualization

Data Mining

Algorithms

Advanced Computer Networks

Intro to Cryptography

Matrices & Linear Algebra

Statistics

Probability

INTERESTS

Martial Arts

Gaming

Cybersecurity

Mechanical Design

Carpentry

Machining and Power Tools