Zak Sujkovic

Brooklyn, NY | 347-220-9153 | zaksuj3@gmail.com | linkedin.com/in/zak-sujkovic

EDUCATION

Binghamton University   Binghamton, NY
B.S. Computer Science   *Expected May 2027*

EXPERIENCE

Software Engineer   May 2025 - Present
Binghamton University Rover Team
- Contribute to the dashboard for a Rover control using Dart and Flutter, allowing for the accuracy of an autonomous driving system
- Implement a deep learning model for image recognition by integrating OpenCV and TensorFlow for navigation
- Optimize subsystems and networks between dashboards through a User Data Protocol in Python

Undergraduate Research Assistant   Jan. 2025 – Present
Binghamton University
- Conduct a comprehensive review of existing literature on the application of large language models in mental health, identifying existing frameworks and algorithms
- Evaluate the ethical considerations and potential biases in large language models when applied to mental health contexts
- Analyze various research papers to assess the impact of language models on mental health diagnostics, therapy, and support systems
- Participate in weekly meetings to discuss progress, challenges, and next steps, providing input for further directions

PROJECTS

Phishing Email Detector | *Python, TensorFlow, Javascript, Node.js*
- Train and fine-tune a TensorFlow-based machine learning model using a large dataset of legitimate and phishing emails, applying NLP techniques for text classification
- Implement a user-friendly front-end interface using JavaScript, allowing users to easily input and analyze email data for potential threats
- Integrate various data pre-processing steps, such as tokenization and feature extraction, to enhance the accuracy of the detection model

Terrain Generator | *C++, OpenGL, Qt, GLSL*
- Implemented procedural terrain generation with Perlin noise-based heightmaps
- Designed and optimized GLSL shaders for transformations and rendering through Phong shading for realistic lighting effects
- Added Qt sliders for real-time control over terrain parameters
- Utilized VAO, VBO, and EBO for efficient mesh rendering

Stock Market Dashboard | *Javascript, React.js, React Native*
- Developed a Stock Market Dashboard using React, React Native, and JavaScript, launched via npm for both web and mobile platforms
- Implemented real-time stock data fetching from Alpha Vantage, dynamically displaying stock prices and historical trends
- Designed an interactive stock price chart with dynamic updates for intuitive data visualization

LEADERSHIP

Community Assistant   June 2024 - Aug. 2024
Alfadila Community Services
- Assisted with back to school giveaways and supplies replenishment
- Prepared a daily food pantry for people in need and students
- Collaborated with philanthropic organizations in Bay Ridge, Brooklyn to give out clothing

TECHNICAL SKILLS

Languages: C++, C, Java, Python, Javascript, MIPS Assembly, HTML, CSS, SQL
Frameworks: React.js, React Native, Node.js, TensorFlow, OpenGL, Qt, Django, REST
Software and OS: QTspim, Visual Studio Code, Vim, Eclipse, Git