Nikolas Vahlas

Year 3, Computer Science Major
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TECHNICAL SKILLS

- **Programming:** Java, C, C++, Object Oriented Programming
- **Tools/Environment:** GitHub, IntelliJ, Visual Studio Code, Heroku
- **Testing:** JUnit, GDB, Jest, Artillery.io
- **Web:** HTML5, CSS, JavaScript, Node.js, PHP
- **Learning:** React.js, Python

PROJECTS

GestureJack | Passion Project | *JavaScript, Node.js, MongoDB, HTML, CSS, Jest, Artillery.io* **Aug 2023 – Sep 2023**
- Merged traditional Blackjack gameplay with modern gesture controls in an 8-bit design using HTML and CSS.
- Utilized the MediaPipe API for instant gesture recognition, enhancing user experience and responsiveness with a 98% accuracy rate during testing.
- Implemented backend features for user registration, login, and progress tracking; system can sustain a rate of 5 requests/sec, with 99% of responses under 550.1ms.
- Engineered game logic using JavaScript, and utilized Jest for unit testing, successfully achieving 100% code coverage, guaranteeing robust and fault-tolerant gameplay mechanics.
- Deployed the application via Heroku and GitHub Pages, ensuring smooth operation and accessibility for users worldwide.

GrandPrixPulse | University Project | *PHP, MySQL, HTML, CSS* **Jul 2023 – Aug 2023**
- Faced with fragmented 20-year racing data, I owned decision making to opt for XAMPP over MAMP due to its user-friendly interface, cross-platform capabilities, and seamless database integration. This facilitated the streamlined integration of more than 1,500 records, guaranteeing cohesive data insights.
- Managed a team of 3 members, planning and delegating tasks to successfully complete the project 15% ahead of schedule.
- Modeled intricate relationships between entities like drivers, sponsors, car models, and engine manufacturers, facilitating in-depth analysis.
- Confronted with the need for fast data retrieval from extensive racing records, I made an executive decision to use PHP/MySQL and to rigorously optimize the queries, resulting in a 300% reduction in SQL query runtime.

FitTrack | University Project | *Java, Object Oriented Programming (OOP), JSON, JUnit* **Sep 2022 – Dec 2022**
- Designed a desktop app that allows users to track their nutritional intake day-to-day.
- Developed a user-friendly interface using Java Swing, enabling users to add custom food entries for personalized dietary tracking.
- Implemented a JSON-based system for macronutrient and calorie data management, ensuring secure and accessible storage, capable of handling over 100,000 entries.
- Achieved 100% code coverage by conducting rigorous unit testing using JUnit, bolstering application robustness.

EXTRACURRICULARS

nwHacks **Jan 2023**
Participant *Vancouver, BC*
- Entered Hackathon and found teammates to design and initiate the development of a platform that matches hackathon participants based on shared interests and complementary skill sets.
- Spearheaded the frontend development, implementing interactive and user-centric logic using JavaScript to enhance the user experience and facilitate effective team formation.

WORK EXPERIENCE

Downlow Chicken   **Oct 2022 – Apr 2023**
Crew Member   *Vancouver, BC*
- Delighted customers during high-volume, fast-paced operations, handling cash and customer feedback.
- Worked with 8 coworkers to sell over $9900 worth of product per day.
- Followed procedures for safe food preparation, assembly, and presentation.

Jim's Mowing Bay Ridge   **May 2022 – Aug 2022**
Landscaper   *Surrey, BC*
- Collaborated with coworkers to mow up to 30 lawns daily.
- Worked on large hardscaping projects, such as water features and patios.

Below The Belt   **May 2021 – Aug 2021**
Sales Associate   *Langley, BC*
- Held the sales record for 5 weeks while working part time and competing with full time employees.
- Handled POS transactions logging up to 40 sales daily.
- Collaborated with and supported other retail team members to sell over $3000 worth of apparel daily.
- Maintained a high level of customer satisfaction by answering questions regarding pricing and merchandise.

VOLUNTEER EXPERIENCE

Soccer Uniform Drive   **Aug 2020 – Sep 2020**
Organizer   *Surrey, BC*
- Coordinated collection and delivery of 300+ uniforms to The Smile of the Child in Athens, Greece.

EDUCATION

University of British Columbia   **Expected graduation May 2025**
BSc, Computer Science   *Vancouver, BC*