LEMUEL PRANOTO
Software Engineer

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SKILLS

Programming Languages	Java, Scala, JavaScript, TypeScript, HTML, CSS, C, C++, Python, R, Verilog
Notable Tools and Technologies	Amazon Web Services (AWS), Git, React Native, ReactJS, NodeJS, ExpressJS, MongoDB, Axios, Mockito, Postman, PostgreSQL, Bootstrap, Docker, IntelliJ, VS Code, Visual Studio, Figma, Jira, OpenGL, Arduino, Adobe Suite (*Ps Pr Ae Lr*)

WORK EXPERIENCE

Amazon.com, Inc.   **August 2022 – April 2023**
Software Development Engineer   *Vancouver, BC*

- Designed and developed a new high-traffic payment authorization authentication widget at retail checkout by writing a dynamic **idempotency key** retrieval logic code in **Scala** alongside fetching other important payment contract metadata from external PayStation entity to successfully onboard a new retail EBT payment method.
- Established a **Java GET SPI** as part of a legacy decoupled payment method **(DPM)** migration that requests payment contract information from external Acculynk PayStation service then returns corresponding data reliably in a high-traffic environment.
- Leveraged native **AWS** technologies to streamline a modular **CI/CD** workflow approach towards sprints and milestones while employing **Amazon Ion** and **RDE stack** to conduct rigorous unit/integration testing, ensuring that code packages and environments shipped to production are robust, maintainable and secure.
- Handled high severity, customer impacting tickets during **oncall** by performing **root-cause analysis** and deep-dive into logs and metrics, subsequently implementing applicable new metrics and alarms to monitor services in attempt to improve **debugging productivity** of fellow service-dependent up/downstream developers and process engineers alike.

SeaHawk Robotics   **June 2021 – August 2021**
Software Engineer, ELPC Intern   *Vancouver, BC*

- Designed and implemented an FPV GUI for a drone capable to launch and land on water while carrying special payloads on **Mission Planner GCS**, further optimizing live video stream from four onboard camera sources by refining latency and resolution with **GStreamer** resulting in an improved stream quality resolution and a 40% reduction in pipeline latency.
- Constructed a winch control interface by modifying the existing control firmware script in **Python** to factor in depth feedback relayed from drone sensors when calculating winch rotation and depth of payload drop.

PT. Pinnacle Persada Investama   **May 2020 – August 2020**
Software Engineer, Intern   *Jakarta, Indonesia*

- Deployed an **AWS Lambda Function** GET request **REST API** endpoint that queries a **PostgreSQL** database by utilizing **SQL** statements to retrieve data based on the parameters set on the Portfolio Management Summary (PMS) mobile app.
- Streamlined a reduction in PMS database query time and established an in-house **stock market API** server for their new branch.

EDUCATION

University of British Columbia   *Vancouver, BC*
Bachelor of Applied Science, Computer Engineering with Co-op   *2018-2022*
Awards: Capstone UBC ECE Faculty Award Winner, 2x Outstanding Student Scholarship, 4x Honorable Mention (Term GPA > 3.7)

TECHNICAL PROJECTS

Land Monitor Mobile-App   **September 2021 – April 2022**
KoroTU Technology (*Capstone Project*)   *Vancouver, BC*

- Designed and developed a **hybrid mobile-app** that detects and informs users of deforestation changes using Land Use/Land Cover (LULC) classification algorithms, utilizing **React Native** to support cross-platform **iOS** and **Android** devices during front-end architectural app build, **Figma** to prototype the user interface design and **Expo** to build and deploy latest version iteratively.
- Architected map component utilizing **Google Earth Engine API** alongside **Google Cloud Storage** for image retrieval and processing, **AWS** for back-end server hosting the database, user authentication data, and search results caching; successfully deployed through the rigorous testing of **REST API endpoints** with **Postman** and **Docker** to ensure environment compatibility.

Event-Manager App   **March 2021**

- Launched a serverless web-app that manages community events hosting as a social platform utilizing **React.js** for UI dynamism and **Node.js** for real-time database manipulation, alongside integrating the **AWS** architecture including **Amazon S3** for hosting**, Amazon Cognito User Pool** for user management**, DynamoDB** for data storage and **Lambda API Gateway** RESTful API calls.
- Incorporated **Axios** to establish a promise **API** for **HTTP** (POST and GET) requests that communicates between the database and client, successfully handling response errors or updating asynchronous data received as part of the protocol.

CHAT'R   **September 2020 – December 2020**

- Created and designed a synchronous and secure online discussion forum webpage in which users are able to create/join a server room that hosts a private/group chat, utilizing **JavaScript** libraries for dynamic functions and malicious attack prevention.
- Employed **Node.js** for handling server side and hosting client-side app, **Express.js** API for communication protocol endpoints, **WebSocket** servers as a message broker, alongside **MongoDB** for database storage.