Abram Perdanaputra Situmorang

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Education

Institut Teknologi Bandung   **Bandung, Indonesia**

Bachelor of Computer Science (2016 to approx. July 2020)   **Cumulative GPA: 3.83 / 4.0** (6 semester)

Experience

Tokopedia (Alibaba Group) - Indonesia's Largest Marketplace   **Jakarta, Indonesia**

Software Engineering Intern, iOS Team   June 2019 - August 2019

- Implemented mission critical application tasks such as Onboarding Screen and Review Page.
- Implemented a login widget that increases login rate up to 4%.
- Initiated Bazel build system for Tokopedia iOS App to reduce CI build time.
- Implemented trackers to track user experiences throughout Tokopedia App.
- Applied the concepts of MVVM Architecture in Mobile App Development, Reactive programming, and functional programming throughout the project.

Technologies: Swift, UIKit, Texture (AsyncDisplayKit), ReactiveX, Fastlane, Bazel.

Bukalapak - Indonesia's Top E-Commerce   **Jakarta, Indonesia**

Software Engineering Intern, Backend - Chat Team   December 2017 – March 2018

- Implemented multi-messenger bot that can can be managed using single and unified API using Elixir.
- Implemented high performing and highly concurrent database system for bot above using MongoDB.
- Improved Bukalapak's chat system by removing bugs and code improvements.
- Applied functional programming and Elixir's genserver concepts in the whole bot manager application.

Technologies: Elixir, MongoDB, GenServer.

Achievements

- **Apple Worldwide Developers Conference (WWDC) 2019 Scholarship Awardee**: Selected out of 7000 applicants by creating a Swift Playground to introduce Computer Graphics to beginner.
- **1st Winner of Grow Asia Hackathon 2019:** Winner out of 132 teams by creating a goal-based, agri-finance application to bring financial literacy to smallholder farmers.
- **4th place of Jenius Co-Create Hackathon 2019:** Out of 500 participants, we create a family financial planner to ensure family's dreams come to reality.
- **PyTorch Scholarship from Facebook awardee**: Scholarship to introduce people around the world to the field of Machine Learning and PyTorch as one of the framework.

Projects

- **Moneywell:** Using Swift 4, I developed and led the development of iOS application for introducing children to financial technology with family monitoring.
- **Wedit**: A GoogleDocs-like desktop application for collaborative editor. Implemented with peer-to-peer connection (TCP socket) and Conflict-free Replicated Data Type (CRDT) to ensure editor's synchronization.
- **Metalify**: A simple yet very easy to understand quickstart tutorial for Metal (Apple's Computer Graphics framework) for beginner in playground.
- **Sliding Window Protocol:** Implemented a vanilla Sliding Window Protocol using UDP Socket to achieve lossless data transfer.

Skills

Languages   : Swift, C++, Java, Python, JavaScript.

Frameworks   : UIKit, AsyncDisplayKit, ReactiveX, TensorFlow (Keras), PyTorch, Node.js, Git, CMAKE, Bazel.