Kohei Suzuki
Machine Learning Engineer

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Summary

Developed an iOS app, DeepColors that helps users colorize sketches and grayscale images, by using the power of DeepLearning. One of highly self-motivated Machine Learning Engineers with **3 years of ML experience** including 6 months of internship at a startup that tried to solve the Cocktail Party Problem by applying state-of-the-art technology in DeepLearning. Looking for a full-time job in the Vancouver area and **already have a valid work permit** for one year in Canada.

Personal Projects

- DeepColors app for iOS   Aug 2020 - Present
  AppStore: https://apps.apple.com/us/app/deepcolors/id1540025064

  - **A mobile app for iOS** that helps users colorize grayscale images and sketches that they draw, by using the power of DeepLearning.
  - Has got 500 downloads in the first 2 months and has an average of 10 daily active users at this point (Jan/15th/2021).
  - Trained **GANs** on GPUs on **GCP** by following original papers, created the client-side in **SwiftUI** and **Swift** from scratch.
  - Set up the server with **Flask** and **Apache2** on **Ubuntu**, **Admob** for the monetization, and configured **Firebase** for the analytics.
  - Took about 3 months to publish the app from the day I learned how to create a view printing out "Hello World" in a View on iOS.
  - The app will have higher quality colorizing models for sketches which will be available for users with monthly subscriptions.
  - Increased 15% of conversion rate by designing high-quality app screenshots displayed on AppStore.
  - Increased 150% profit by applying Admob mediation, which serves ads that likely have the highest eCPM among ad sources.

- Speech-To-Text app with Flask   Jul 2020 - Aug 2020
  Github: https://github.com/boblef/auto_transcript

  - Was a **Flask** app in which user can upload a video or an audio file and can download a zip file that contains files of transcripts of the speech in the file they uploaded.
  - It took the audio from the video they uploaded and converted it to a 1-D **Numpy** array fed into Baidu's DeepSpeech model after pre-processing was done. The output from the model was then fed into a language model to improve the prediction accuracy.

Working Experience

- Freelance Developer in Yokohama, Japan   Apr 2020 - Present
  Machine Learning related and Python development

  - Developed an iOS app, DeepColors, by using the power of DeepLearning.
  - Worked as a mentor for students of online courses in order to gain skills such as **clear explanation** and **leadership**.
  - Joined a team working on a data science project that inspired me with different perspectives and insights.
  - Worked on some Python projects such as creating simple websites and scraping to collect data from the web.

- Singular Software Inc. in Vancouver, Canada   Jan 2019 - Jun 2019
  Machine Learning engineer intern

  Singular Software is a company that developed a phone-based hearing assistive app, HeardThat which was debuted at CES 2020, that helps people to hear speech in noisy situations by using the power of deep learning. The company was nominated at the top 10 out of about 200 in the New Venture BC 2019 competition and was also the winner of the 2020 What's Next Innovation Challenge.

  Reference from the CEO, Bruce Sharpe:
  https://boblef.github.io/docs/Reference_letter_for_Kohei%20Suzuki.pdf

  - Joined the team in the early development phase, and took initiative on the role of creating several platforms for model evaluation.
  - Designed and developed an internal software with **clarified documentation** for editing audio files and doing arithmetic calculations between them.
  - Presented an idea of an external platform for Mechanical Turk and developed it with databases that I constructed to keep track of metrics.
  - Presented insights to members from my perspective with the result of the evaluation by using appropriate metrics such as **WER** and **MOS**.
  - Worked with team members in an **agile** way by changing things as we needed and learned how **Scrum** works.
  - Since the internship was **remote**, gained necessary skills such as **SSH** on **Ubuntu**, **good communication skills** with both verbal and written English with concise explanations.

Education

- GCI2019 at the University of Tokyo	Dec 2019 - Mar 2020
- Machine Learning Bootcamp at 7 Gate Academy	Jul 2019 - Sep 2019
- Institute of Technology Development of Canada	Jul 2019 - Jun 2019
Calculative GPA: 3.7/4.0	
- Data Science Bootcamp at Brain Station Vancouver	Apr 2018 - Jun 2018
- Bachelor Degree in Computer Science at Tokyo City University	Apr 2012 - Apr 2013

Skills

Programming Languages: Python, C/C++, Swift, SwiftUI, SQL, Java, Bash
Machine Learning: Computer Vision, NLP, Time Series, Reinforcement Learning, Classic ML Algorithms
Python Libraries: Tensorflow, PyTorch, Pandas, Numpy, Matplotlib, OpenCV, Sklearn, Jupyter Notebook, Flask, unittest
OS: Linux, MacOS
Others: AWS (EC2, DynamoDB, CloudWatch), GCP, Github, iOS app development, Docker, CircleCI, Scrum, Agile, Algorithms and Data structures, Quantum programming (Dwave-Ocean-SDK)