Yuxi Wang

(+81)070-8326-7466 | yuxivision@gmail.com | linkedin.com/in/wyuxi | github.com/kdplus

Experience

Amazon Tokyo, Japan

Software Development Engineer *Apr. 2022 – Present*

- Developed a Java Checkstyle package to enforce consistent coding standards across the team.
- Independently designed and implemented a points display feature on Amazon widgets for both web and mobile platforms in the shopping category page. Developed and orchestrated the project from low-level design to UX change proposal and front-end and back-end implementation. Conducted UAT testing and A/B test experiments to ensure the feature was delivered with high quality, resulting in a boost in user engagement and satisfaction.
- Implemented a points breakdown widget on the Amazon cart page for both web and mobile platforms, which enabled users to understand the details of the points they could earn from the products in their cart, resulting in a better user experience.
- Implemented service's AWS Cloud Development Kit package to manage AWS infrastructure and resources, including configuring pipeline setup and creating monitoring dashboards and alarms, to enable continuous integration and delivery as well as safer deployments.

Huawei Japan Research Center Tokyo, Japan

Research Engineer intern *Oct. 2020 – Jan. 2021*

- Researched and developed a video deblurring algorithm that achieves state-of-the-art results.
- Designed a novel structure that optimizes the use of input information to enhance the realism of the output, and conducted comparative analysis to validate the effectiveness of the developed components.

CyberAgent AI Lab Tokyo, Japan

Research Engineer intern *Aug. 2020 – Sep. 2020*

- Developed a self-supervised representation learning algorithm for an advertisement dataset, enabling better understanding and prediction of user engagement with ads.
- Devised and implemented a novel learning system that leverages the audio and video correlation of advertisement videos as a powerful self-supervision signal.

SJTU Machine Vision and Intelligence Group Shanghai, China

Undergraduate research assistants *Nov. 2016 – Jun. 2018*

- Developed an IC components classification and position tracking system, enabling efficient and accurate identification and tracking of IC components.
- Designed an innovative algorithm that effectively detects surface scratches on industrial parts with uneven surfaces, and co-authored a paper on the topic published in ICIP 2018 (1508-1512).

Projects

Self-Supervised Representation Learning Via Video Frame Rate Prediction *Aug. 2019 – Mar. 2020*

- Introduced a novel self-supervised task of training the network to predict the frame rate of input videos.
- Demonstrated the learned network's ability to effectively capture the spatial-temporal features in the videos.
- Achieved competitive accuracy on the action recognition task by fine-tuning the learned network.

Video Interpolation Based On Deep Learning *Feb. 2018 – Jun. 2018*

- Proposed a novel video interpolation algorithm that generates more realistic middle frames.
- Designed a new form of optical flow for video interpolation task, improving accuracy and ease of training.
- Designed a novel structure that estimates middle frame feature channel-wise to avoid blurred contours in results.

Education

The University of Tokyo Tokyo, Japan

Master of Engineering in Information & Communication Engineering *Sep. 2018 – Sep. 2020*

Shanghai Jiao Tong University Shanghai, China

Bachelor of Engineering in Computer Science *Sep. 2013 – Jun. 2018*

Technical Skills

Languages: Professional working proficiency: English & Japanese(N1). Native: Chinese
Programming Languages: Python, C++, Java
Tools: Git, Vim, AWS, Docker, PyTorch, TensorFlow, Django

王　誉錫

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Experience

Amazon Tokyo, Japan
ソフトウェアエンジニア *Apr. 2022 – Present*

- JavaのCheckstyleパッケージを開発し、チーム全体でコーディング規約を統一化。
- Amazonのウィジェットに、商品ページでのポイント表示機能のデザイン及びWebとモバイル両方に実装。UATテストとA/Bテストを実施し、高品質でユーザーエンゲージメントと満足度の向上につながった。
- Amazonカートページにポイント分解ウィジェットを Webとモバイル両方に実装し、ユーザーエクスペリエンスを向上。
- AWS Cloud Development Kitパッケージを導入し、AWSのインフラストラクチャとリソースを管理し、CI/CDを実現するためのパイプライン設定とモニタリングダッシュボードやアラームの作成も担当。

Huawei Japan Research Center Tokyo, Japan
研究エンジニアインターン *Oct. 2020 – Jan. 2021*

- 最先端の成果を達成するビデオのぼやけ補正アルゴリズムを研究開発。
- 入力情報を最適に活用し、出力のクオリティを向上させるために新しい構造を設計し、開発されたコンポーネントの効果を検証するために比較分析を実施しました。

CyberAgent AI Lab Tokyo, Japan
研究エンジニアインターン *Aug. 2020 – Sep. 2020*

- 広告データセット向けの自己教師あり表現学習アルゴリズムを開発し、ユーザーのエンゲージメントをよりよく理解して予測できるようにしました。
- 広告ビデオの音声と映像の相関を強力な自己教師信号として利用するノベルな学習システムを考案・実装しました。

SJTU Machine Vision and Intelligence Group Shanghai, China
学部生研究アシスタント *Nov. 2016 – Jun. 2018*

- IC部品の分類と位置追跡システムの開発を担当し、効率的かつ正確なIC部品の識別・追跡を実現しました。
- 非均一な表面を持つ工業製品の傷検出を効率的に行う新しいアルゴリズムを設計し、ICIP 2018（1508-1512）で発表された論文の共著者として参加しました。

Projects

Self-Supervised Representation Learning Via Video Frame Rate Prediction *Aug. 2019 – Mar. 2020*

- 入力ビデオのフレームレートを予測するネットワークをトレーニングする自己教師ありタスクを提案しました。
- 学習済みネットワークがビデオの空間時間的な特徴を効果的に捉えられることを示しました。
- 学習済みネットワークを微調整して、アクション認識タスクで競争力のある精度を達成しました。

Video Interpolation Based On Deep Learning *Feb. 2018 – Jun. 2018*

- より現実的な中間フレームを生成するノベルなビデオ補間アルゴリズムを提案しました。
- ビデオ補間タスクに向けた新しい形式のオプティカルフローを設計し、精度とトレーニングの容易さを向上させました。
- 中間フレームの特徴をチャンネルごとに推定するノベルな構造を設計して、結果のぼやけた輪郭を回避しました。

Education

東京大学大学院 Tokyo, Japan
情報理工学系研究科電子情報専攻　修士 *Sep. 2018 – Sep. 2020*

上海交通大学 Shanghai, China
コンピュータサイエンス　学士 *Sep. 2013 – Jun. 2018*

Technical Skills

Languages: 上級：英語&日本語(N1)。母語：中国語
Programming Languages: Python, C++, Java
Tools: Git, Vim, AWS, Docker, PyTorch, TensorFlow, Django

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これまでの研究内容

Self-supervised Representation Learning Via Video Frame Rate Prediction *Aug. 2019 – Mar. 2020*

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Video Interpolation Based On Deep Learning *Feb. 2018 – Jun. 2018*

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- Designed a novel structure that estimates middle frame feature channel-wise to avoid blurred contours in results.

Video Colorization For Old Films *Dec. 2021 – Jan. 2022*

- Implemented the video colorization deep learning network of Deoldify on PyTorch and enhanced its colorization quality on old films.

Huawei Japan Research Center Tokyo, Japan

Research Engineer intern *Oct. 2020 – Jan. 2021*

- Researched and developed a video deblurring algorithm that achieves state-of-the-art results.
- Designed a novel structure that optimizes the use of input information to enhance the realism of the output, and conducted comparative analysis to validate the effectiveness of the developed components.

CyberAgent AI Lab Tokyo, Japan

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- Designed an innovative algorithm that effectively detects surface scratches on industrial parts with uneven surfaces, and co-authored a paper on the topic published in ICIP 2018 (1508-1512).

Yitu Technology Shanghai, China

Research Engineer intern *Jun. 2017 – Sep. 2017*

- Developed a medical imaging-based lung nodule analysis system.
- Designed, implemented, and accelerated the neural network to achieve the best performance and accuracy.

興味のある研究テーマ

Computer Vision

- Video Understanding
- Self-Supervised Learning & Unsupervised Learning
- Multi-Modal Learning
- Video Frame Interpolation
- Video Generation
- Neural Radiance Fields