Emilie Yu

University of California Santa Barbara, USA
Curriculum Vitae

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Education

Inria, Université Côte d'Azur   *2020 - 2023*
PhD in Computer Science – *supervised by Adrien Bousseau*

Technical University of Denmark   *2018 - 2020*
MSc in Digital Media Engineering – *Master thesis supervised by J. Andreas Bærentzen*

CentraleSupélec   *2015 - 2017*
BSc and MSc in Engineering – *3rd top Engineering School in France*

Research Experience

UCSB – Expressive Computationa Lab   *May 2024 - now*
Postdoctoral researcher – *supervised by Jennifer Jacobs*

University of Toronto – Dynamic Graphics Project   *Summer 2023*
Visiting Researcher – *supervised by Fanny Chevalier and Karan Singh*

Adobe Research   *Summer 2022*
Research Intern – *supervised by Rubaiat Habib Kazi and Wilmot Li*

Inria, Université Côte d'Azur   *Feb. 2020 - Aug. 2020*
Research Intern – *supervised by Adrien Bousseau*

Publications

texTile: Making and Re-making Crochet Granny Square Garments Through Computational Design and 3D-printed Connectors
Ashley Del Valle, Jennifer Jacobs, **Emilie Yu**
In Proceedings of the ACM Conference on Designing Interactive Systems (DIS), 2025

3D-Layers: Bringing Layer-Based Color Editing to VR Painting
Emilie Yu, Fanny Chevalier, Karan Singh and Adrien Bousseau
ACM Transactions on Graphics, presented at SIGGRAPH 2024
⬈ webpage 📄 paper </> code

VideoDoodles: Hand-Drawn Animations on Videos with Scene-Aware Canvases
Emilie Yu, Kevin Blackburn-Matzen, Cuong Nguyen, Oliver Wang, Rubaiat Habib Kazi and Adrien Bousseau
ACM Transactions on Graphics, presented at SIGGRAPH 2023
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Piecewise-Smooth Surface Fitting onto Unstructured 3D Sketches
Emilie Yu, Rahul Arora, J. Andreas Bærentzen, Karan Singh, and Adrien Bousseau
ACM Transactions on Graphics, presented at SIGGRAPH 2022
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CASSIE: Curve And Surface Sketching in Immersive Environments
Emilie Yu, Rahul Arora, Tibor Stanko, J. Andreas Bærentzen, Karan Singh, and Adrien Bousseau
In Proceedings of the ACM Conference on Human Factors in Computing Systems, CHI '21,
⬈ webpage 📄 paper </> code

Professional Experience

Unity Technologies   *2019 - 2020*
Continuous integration, continuous deployment – *Infrastructure support and software development*

Datawords   *Jul. 2017 - Dec. 2017*
Fullstack web developer

Août Secours Alimentaire (food aid association) *Summer 2016*
Logistics assistant manager

Awards

PhD Dissertation Award – french Informatics Society (SIF) ⬀ *2024*
Awarded based on the thesis manuscript and jury report.

PhD Dissertation Award – french Computer Graphics Association (GdR IG-RV) ⬀ *2024*
Awarded based on the thesis manuscript and jury report.

Best Demo Award at IHM 2024 *2024*
VideoDoodles: Hand-Drawn Animations on Videos with Scene-Aware Canvases
Francophone human-computer-interaction conference (IHM 2024)
Best out of 45 demos

Mitacs Globalink Research Award *2023*
Awarded for a 3-months research collaboration at the University of Toronto – *6,000 CAD*

WiGRAPH Rising Stars in Computer Graphics ⬀ *2022 - 2023*
Academic Career Workshop in Siggraph – *Travel funding for attending Siggraph twice*

Recipient of Best Paper Honorable Mention Award *2021*
CASSIE: Curve And Surface Sketching in Immersive Environments
ACM Conference on Human Factors in Computing Systems (CHI).
Top 5% of submissions

Teaching

Object Oriented Programming – MIAGE Nice *2021-2023*
Teaching Assistant

Computer Graphics Introduction – Technical University of Denmark *Fall 2019*
Teaching Assistant

Service & Volunteering

Program committee member *2025 - now*
ACM **TEI** 2025 Papers track, ACM **DIS** 2025 Pictorials track

External reviewer *2021 to now*
ACM **SIGGRAPH** 2025, ACM **Transactions on Graphics** 2025, ACM **CHI** 2024 / 2025 (Special Recognition), ACM **UIST** 2021 / 2023 / 2024 (Special Recognition), ACM **DIS** 2022 (Special Recognition), ACM **C&C** 2021, **Eurographics** 2024 / 2025, **Pacific Graphics** 2023 / 2024, ACM **IMX** 2024, IEEE **ISMAR** 2024, IEEE **VR** 2025, ACM **SIGGRAPH** Posters 2023 / 2024.

Executive Committee – WiGRAPH (ACM Community Group for Women in Computer Graphics Research) *2024-now*
Online Presence and Outreach Coordinator.

Volunteer for WiGRAPH *2022-2024*
Assist in the organization of the yearly Berthouzoz Women in Research Lunch at Siggraph 2022, 2023 and 2024.

Student volunteer at conferences *2019-2022*
Eurographics 2019, JFIG 2021, Eurographics 2022

Invited talks

Designing tools for 3D content authoring based on 3D sketching

Journées françaises de l'informatique graphique – *PhD award ceremony*   *Virtual* – *Oct. 2024*
Graphics And Mixed Environment Symposium webinar – *invited by Zeyu Wang*   *Virtual* – *Jul. 2024*
University of California Santa Barbara – *hosted by Jennifer Jacobs and Tobias Höllerer*   *Santa Barbara (USA)* – *Aug. 2023*
University of British Columbia – *hosted by Alla Sheffer*   *Vancouver (Canada)* – *Jul. 2023*

VideoDoodles: Hand-Drawn Animations on Videos with Scene-Aware Canvases

Inria ex)situ lab – *hosted by Theophanis Tsandilas and Wendy Mackay*   *Palaiseau (France)* – *May 2023*
Inria MFX lab – *hosted by Sylvain Lefebvre*   *Nancy (France)* – *May 2023*
Technical University of Denmark Christmas Workshop 2022 – *hosted by J. Andreas Bærentzen*   *Lyngby (Denmark)* – *Dec 2022*

VR Sketching for Surface Modeling

University of Surrey SketchX virtual seminar – *hosted by Yulia Gryadistskaya*   *Virtual* – *Sep. 2022*

CASSIE: Curve And Surface Sketching in Immersive Environments

Toronto Geometry Colloquium – *opener talk*   *Virtual* – *Oct. 2021*
JFIG 2020 – *presentation to the french computer graphics community*   *Virtual* – *Nov. 2020*