# CHRISTOPHE BOLDUC

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## **EDUCATION**

#### UNIVERSITY STUDIES

- Université Laval, (2023-), Ph.D. Electrical Engineering, Computer Vision
- Université Laval, (2022-2023), Master Electrical Engineering, Computer Vision
- Université Laval, (2018-2021), Bachelor Computer engineering, Distinction Profile

# COLLEGIAL STUDIES

 Collège Champlain St-Lawrence, (2016-2018), Pure & Applied Sciences, Member of St. Lawrence Entrepreneurship club

#### COMPLEMENTARY STUDIES

- Graphic Design Specialization, Coursera, California Institute of the Arts (2019)
- Greek and Roman Mythology, Coursera, University of Pennsylvania (2018)
- Page Layout, *Toronto Film School* (2018)
- Elements of design, *Toronto Film School* (2018)
- Understanding the Brain: The Neurobiology of Everyday Life, Coursera, Université de Chicago (2018)

## RESEARCH

## PUBLICATIONS

 Beyond the Pixel: a Photometrically Calibrated HDR Dataset for Luminance and Color Prediction. Christophe Bolduc, Justine Giroux, Marc Hébert, Claude Demers, and Jean-François Lalonde. ORAL, International Conference on Computer Vision (ICCV) (2023)

# PRESENTATIONS

- Multi-view, multi-light: a multi-view photometric stereoscopy method using gaussian splatting. POSTER, Colloque REPARTI (2024)
- Beyond the Pixel. Christophe Bolduc. POSTER, Colloque REPARTI (2023)
- Beyond the Pixel. Christophe Bolduc. ORAL, Semaine NumeriQC (2023)
- Jesse Greener, Christophe Bolduc. A Coulombic simulator to visualize molecular structures and intermolecular interactions (ORAL). IUPAC CCCE 2021 104th Canadian Chemistry Conference and Exhibition, Montreal, Canada (2021)

# COPYRIGHTS

■ The Laval Photometric Indoor HDR Dataset (2023)

# WORK EXPERIENCE

# RESEARCH INTERN

- Research scientist intern, Adobe Inc (2024)
- Research assistant, *Université Laval, École d'architecture* (2022)
- Development of a system constructing and visualizing vector fields from cloud points, Laboratoire de vision et systèmes numériques (2020)

#### TEACHING ASSISTANT

- Photographie algorithmique, Université Laval, Département de génie électrique et de génie informatique (2024)
- Vision Numérique, Université Laval, Département de génie électrique et de génie informatique (2021-2023)
- Systèmes embarqués temps réel, Université Laval, Département de génie électrique et de génie informatique (2022)
- Development of a Coulombic particles simulator as a web application, *Université Laval, Département de Chimie* (2020)

### SCIENTIFIC PROGRAMMER

• Research and Development, *Créaform3D* (2021)

## ASSISTANT-PRODUCTION

• Optic fiber production, *Teraxion* (2018)

#### VIDEO PRODUCTION

- Animation for investors, *Harmonia* (2018)
- Introduction video to the annual seminar, Fédération des établissements d'enseignement privés (2016)
- Video production of dance shows, *Collège de Champigny* (2016-2021)

## AWARDS AND SCHOLARSHIPS

#### AWARDS

- AI and data next generation, Semaine NumériQc (2023)
- Distinction profile, computer engineering undergraduate studies (2022)

## SCHOLARSHIPS

- Faculty success scholarship (2023-2024)
- Research scholarship Sentinel North (2022-2023)
- Excellence scholarship for diploma in computer science and information technology (2022)
- Undergraduate Student Research Awards NSERC (2020)
- Excellence scholarship Ubisoft (2019)
- Emerging scholarship Théodore-Wildi (2018)

## OTHER EXPERIENCE

# SOCIAL IMPLICATIONS

- Video productions on 3D printer for high school students, *le code des filles* (2020)
- President, *IEEE student branch*, *Université Laval* (2020-2021)
- Member of the program committee in electrical and computer engineering, *Université Laval* (2019–2021)
- Vice-President, *IEEE student branch*, *Université Laval* (2019-2020)

## COMPETITIONS

- Frima Studio Award, *Ubisoft Game Lab Competition* (2020)
- Public's choice, Conseil québécois de la coopération et de la mutualité (2017)
- National finalist, *Science on tourne* (2017)
- First place, *Zoom minier* (2016)