

Pierre Amelot

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EDUCATION

Carnegie Mellon University

Pittsburgh, PA | 2016 - 2017

M.S. Human-Computer Interaction
School of Computer Science

GPA: 4.07

École Polytechnique

Paris, France | 2013 - 2016

B.S. Computer Science and Mathematics
M.S. Computer Science

Entry rank: 21 out of 4500 applicants

GPA: 3.94

SKILLS

Design

Figma
After Effects
Illustrator
Blender
Photoshop
InDesign

Programming

C++ 14
ROS
QT5
OpenGL
OpenFrameworks
OpenCV
C#
Unity3D

UX Research

Contextual Inquiry
Think Aloud Testing
Affinity Diagrams
Heuristic Evaluation
Diary Studies
Surveys

Javascript

React
Typescript
D3
Node

Python

Toolz
Panda
Matplotlib

SQL

Java
Android

EXPERIENCE

Ouster — Embedded UI/UX Engineer

San Francisco, CA | Aug 2018 - Now

Designed, developed, and launched a real-time lidar point cloud visualization app to help garbage truck drivers see 360° and avoid collisions. Incorporated user-centered design methodology throughout the project.

- Led contextual inquiry with garbage truck drivers on 15 ridealongs to understand their driving environment and visibility pain points.
- Created 4 visualization prototypes in parallel. User tested options during think aloud sessions in a simulated driving environment.
- Wrote, tested, and deployed production code for the finalized MVP visualization in C++14 using VTK, SDL, and EGL to allow for real-time rendering on an embedded computer without an X server.
- Improved vehicle 3D models and developed Python scripts to reduce operational overhead for system install and recalibration.
- Logged product analytics using rostopics, visualized data remotely using custom GCP Data Studio dashboards, and led a diary study with 12 drivers to understand initial product adoption.
- Drove product strategy, informed by competitive analysis and research findings, and produced client pitch decks, strengthened by videos of authentic user experiences collected during ridealongs.

Oversaw the user experience and development of a web tool for managers of vehicle fleets to request data and replay accidents in 3D in their browser.

- Headed primary/secondary user research and guided internal team brainstorming sessions to narrow in on incident review concept.
- Managed and provided guidance to contractors throughout design and user testing phases, and engineers during implementation.

National Robotics Engineering

Center (NREC) — Graphics Engineer

Pittsburgh, PA | Oct 2017 - Aug 2018

Designed and developed an AR app to support US military deminers in improving their technique using a metal detector. Implemented rapid iterations of 3 versions of the app for HoloLens, ODG R7, and handheld tablet using Unity 3D. Led user testing on 5+ UI options.

Prototyped UIs and visualization tools in C++ (Godot and QT5) for 2 robotics projects: automated distribution centers and automated solidification of the of the Mississippi river banks.

Hypno VR — UX Engineer (Freelance)

Remote | Dec 2017 - Nov 2018

Designed and developed an Oculus Rift Unity app for a startup team of anesthesiologists who place patients in a hypnotic state for surgery.

Columbia University — AR Developer Intern

New York City, NY | Apr 2016 - Aug 2016

Developed, under the supervision of Pr. Steven Feiner, a music exploration experience in AR. Combined HoloLens, Leap Motion Controller, and Spotify Web API to enable users to manipulate and play virtual CDs.