# Léonard Roussel

# Creative technologist, audio-visual consultant, sound designer

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## Professional & academic experience (see <a href="portfolio">portfolio</a> for detailed project references)

- > Arup Consultant, Acoustics + Audiovisual + Experience Design (<u>selected projects</u>) 2016 - 2020, New York + 2015 - 2016, Amsterdam
  - > Architectural acoustic design Sound field capture and simulation Soundscape research
  - > Audiovisual systems design, documentation & specifications On-site commissioning and testing
  - > Data-driven, generative, interactive, digital art installations Immersive sound design
  - > Multidisciplinary collaborations with architects, designers, and artists
  - > Design expertise from concept to completion at various project scales Project management
- > New York University Integrated Digital Media Thesis Advisor, MSc program 2019, New York
  - > Review, mentorship, and advice for a student's thesis researching novel applications for audio descriptors extracted from human voice content
  - > Experimental process and results analysis, documentation, critique, final jury & discussion
- > Arup Intern, Acoustics + Audiovisual

2014, New York + 2013, Amsterdam

- > Acoustics & building physics 3D modeling Sound field capture and simulation Sound design
- > Parametric design Software development Automation
- > Institut de Recherche & Coordination Acoustique-Musique (IRCAM) Research intern 2012, Paris
  - > Development of 3D audio analysis and synthesis tools to inform the research and development of cutting-edge spatial audio design software (Spat~ package for Max/MSP)
  - > Spatial audio data manipulation, automated audio processing, software development
  - > Experimentation and systematic testing in the IRCAM anechoic studios and performance room

## Education

- > Engineering degree (equiv. MSc)
  Civil engineering + acoustics major
  2015, École Centrale de Lyon (FR)
- Master of Sciences
  Acoustics + signal processing
  2015, Institut National des Sciences Appliquées
  de Lyon (FR)

### Languages

> English: fluent
> French: native

> Dutch, German, Spanish: basic

#### Awards & Recognition

- > ACEC Engineering Excellence Gold Award Sounds Of the Future City (New York, 2020)
- Hack The Planet NY: Best Documentation
  DIY DNA monitoring (New York, 2016)
- > Animamus Art Salon NY
   Kryptoflex (New York, 2014)

#### Computational & C.A.D. skills

- > 3D Modeling & rendering Rhino + Grasshopper, SketchUp, AutoCAD, Revit, Dynamo, Twinmotion
- > Creative coding frameworks
  Processing, Cinder, Openframeworks, Arduino,
  Max/MSP/Jitter, TouchDesigner (beginner)
- > Programming environments
  Python, Java, C++, C#, GLSL, Javascript,
  HTML, CSS, Matlab
- > Sound design
   Ableton Live, Logic, Reaper, Spat Revolution, Spat~
- > Adobe Creative Suite
- Acoustic modeling CATT Acoustic, Odeon, EASE

#### Other interests & ongoing learning

- > 3D modeling, animation, rendering Houdini, Cinema4D, Substance, Unity
- > Theater production 2014 Winterreise Cie Théâtre • Assistant stage director 2012 Organisation Spectacle Étudiant • Stage director
- > Music & performing arts
  Flute, choir, composition, DJing
  2016 Sonic Acts Festival (NL): Production assistant
  2012 Nuits Sonores Festival (FR): Production
  assistant