

SKILLS

EXPERIENCE

Java | JavaFX
 Javascript | Typescript
 HTML | CSS
 WebGL | JOGL | OpenGL
 Python
 C#

 React | Redux
 Three.js
 D3.js
 MapboxGL | DeckGL
 Node | NPM
 MongoDB
 Git

 Rhino3D | Grasshopper
 Revit | Dynamo
 CAD | CAM systems
 3D printing
 Motion Capture
 Rigging
 GIS

 Spatial hierarchy
 Data structures
 Design patterns
 Software architecture
 Rapid Prototyping
 UX / UI

NATIONALITY

Switzerland | USA

LANGUAGES

English - Native
 French - Native
 Spanish ~ 6years

- 11/15 - 8/19 - 11/15 - 8/19** **WOODS BAGOT ARCHITECTS | San Francisco, CA + Seattle, WA**
Senior Design Researcher | Lead Software Developer [ERA-co]
Design Researcher | Software Developer [SUPERSPACE]
 Full-stack computational geometry specialist and lead software developer, creating bespoke internal and client facing applications for the automation, optimization, analysis and visualization of data-driven architectural design solutions.
 - Network | graph analysis + routing [flow | program adjacency | layout topology]
 - Predictive user-cluster based behavioral modelling + agent based simulation
 - Site selection + client investment strategy + financial construction models
 - Space syntax | environment + user experience key performance indicators
 - Geometry rationalization + generative form-finding + facade systems
 - Design space optimization routines + algorithms
 - Pipeline streamlining + software interoperability [CAD | BIM | Custom]
 - Firm-wide global design decision making support + impact assessment for various project phases, scales & building typologies
 - Urban | Masterplan | Site | Building | Floorplate | Test-Fit | Layout | Post-Occupancy
 - Aviation | Retail | Workplace | Residential | Education | Healthcare
- 8/13 - 8/16** **UNIVERSITY OF CALIFORNIA | Berkeley, CA**
8/14- 8/16 *Faculty Lecturer - Architecture + Design Computation*
 Taught undergraduate, graduate and post-professional lectures, seminars and design studios.
 - Arch 205a - Studio One [Post-Professional Computational Design Studio]
 - Arch 205b - Studio One [Python + Grasshopper Scripting Seminar]
 - Arch 229 - Computational Manufacturing [Architecture + EECS Seminar]
 - Arch 124b - Advanced 2D | 3D Parametric Modelling + Optimization
 - ATDP 3315 - Architectural Design
- 8/14 - 8/15** *Design Research Specialist | Software Developer [UCB + Autodesk | Pier 9 collaboration]*
 Implemented computational workflows for architectural design, optimization, and manufacturing.
 - Generative design + form finding
 - Physics simulation + structural/environmental analysis.
 - Big data analysis and visualization.
- 5/13 - 8/14** *Graduate Student Researcher | Autodesk IDEA Studio Fellow*
 Lead Developer for the Decod.es CAD Geometry Kernel for Rhino/Grasshopper, Revit/Dynamo, as part of the Autodesk IDEA Studio Fellowship 2013.
- 8/13 - 12/13** *Graduate Student Instructor – Python | Grasshopper | Rhinoceros 3D*
- 5/15 - 8/15** **GENERALIZED SOLUTIONS, LLC | Berkeley, CA**
Lead Software Developer | Data Scientist
 Prototyped a geomagnetic positioning (IndoorAtlas) + indoor/outdoor location tracking mobile application (Android), tested at the Design Modelling Symposium Copenhagen 2015.
 Developed analytical processes and visualization methodologies for the exploration and usage of large scale urban flow data in design strategies.
- 6/12 - 8/12** **STUDIO URBIS | Berkeley, CA**
Architectural Intern
- 10/10 - 7/11** **CONCEPT-CONSULT ARCHITECTES | Lausanne, Switzerland**
Architectural Intern
- 8/07 - 10/07** **FUNDACIÓN YANAPUMA | Ecuador**
Construction Volunteer
 Sustainable dry toilet construction for use by Amazon Basin indigenous communities
- 6/07 - 8/07** **MARIUS PANNATIER MENUISERIE | Evolene, Switzerland**
Construction | Carpentry + Chalet renovation
 Position also involved the bidaily milking, grazing and care of a dozen Swiss fighting cows.

EDUCATION

- 8/11 - 5/14** **UNIVERSITY OF CALIFORNIA | Berkeley, CA**
Master of Architecture
- 8/06 - 5/10** **CHAPMAN UNIVERSITY | Orange, CA**
B.F.A in Digital Arts + Game Development Programming