

## 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 architect, developing 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 + Computational Design*  
 Taught undergraduate, graduate and post-professional lectures, seminars and design studios.
  - Arch 2015a - 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, Minor in Game Development Programming*