# **CURRICULUM VITAE**



Alan Rynne Vidal
Building Engineer
Computational Designer



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Availability: AUG.2018

## ▲ About me

I am a Building Engineer with a broad skillset ranging from Architectural Design & Construction Management to Web & Software Development; I have a keen eye for detail and experience in sales and client relationships.

I am a quick study with a proactive mentality and am passionate about rationalizing freeform surfaces in Architecture; optimizing structural behavior and construction processes; and developing new tools with C# to help in those tasks. I recently finished a Master's Degree in Parametric Design with a final grade of 10.8/10 in the Master's thesis, and overall average grade of 9.1.

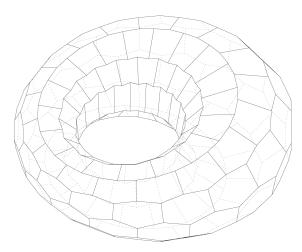
Currently working as an auxiliary teacher at the MPDA'19 Master's degree in Barcelona but willing to relocate and/or travel if needed.

# Areas of expertise

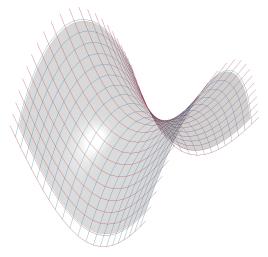
- Complex 3D Modeling
- Computational Form-Finding & Structural Design
- Design of Discrete Assemblies
- BIM

- Construction Management
- Python & C# Programming
- Interactive Architectural & Data Visualizations
- Workflow Optimization

# Some of my latest scripts:



Dupin Cyclide covered in planar hexagonal panels



Hyperbolic Paraboloid covered by a Chebychev Net, also known as 'compass method'.

# Experience

#### Auxiliary teacher. MPDA'19 - Nov.18 - Present

I recently started as an auxiliary teacher at the Master's in Parametric Design in Architecture at the UPC in Barcelona, helping out in the subjects of Parametric Geometry and Digital Fabrication.

#### Founder. www.paramdigma.com — Oct. 18 - Present

Paramdigma is a website for knowledge divulgation around computational design and parametric tools, specifically centered on the professional use of the tools, good practices, methodology and collaboration workflows. Launch date is scheduled to be **15 Nov 2018.** 

### Internship at CODA. Barcelona (ESP) - Oct. 18 - Present

2 month internship at Computational Design Affairs (www.coda-office.com).

## Real Estate Consultant. Vivienda2. Madrid (ESP) — Jan. 17-Jun. 18

Worked in the Sales department from January to March 17, when I was promoted to liaise with property owners.

#### Web development. 'Marta Cariño'. Madrid (ESP) - Nov. 16-Mar. 17

Design, development & deployment of a the corporate website for a well-known brand of nightclubs in Madrid.

#### Real Estate Consultant, Engel&Völkers; Madrid (ESP) — Aug. 16-Sept. 17

Working as realtor assigned to 'La Latina' in Madrid's central district until March 2017, when I was promoted to the 'Malasaña' area.

# Real Estate Developer & Construction Manager, DBS; Santiago de Querétaro (MEX) — Mar. 14-Jun. 16

Part-owner of DBS, a small company located in Querétaro (MEX) dedicated to the design, development and construction of detached houses (50 to 200 sqm).

#### Web Development, 'Bhotanical®'; Madrid (ESP) - Jan. 15-Mar. 15

Design, development & deployment of a website for the Bhotanical® brand.

#### Webmaster, 'TraductorJurado.com'; Madrid (ESP) - Sep. 11-Mar. 14

Design, development & deployment of a new business line focused on the creation of an online shop to offer sworn translation services.

#### Web Developer, 'DBS.com' - Jan. 14-Mar. 14

Design, development & deployment of a corporate website for the company DBS "Desarrolladora Bahía Santander".

#### Summer work, Versalia Traducción S.L. — 2007-2011 (June to August)

Office administration & basic English/Spanish and Spanish/English translations under supervision.

### Education

# Universitat Politècnica de Catalunya (ETSAV), Barcelona (ESP). Master's Degree in Parametric Design in Architecture, Oct. 2017- present

Oriented to the integration of computational tools and digital manufacturing technology in building systems and architectural design. **Thesis GPA: 10.8/10** 

# Universidad Europea de Madrid, Madrid (ESP). Arquitectura Técnica (Building Engineering), 2011

Graduated in 2011 from the UEM with a 10/10 grade in the final project.

#### ControlMad, Madrid (ESP). 3D Modeling & Digital Fabrication. June 2017

Intensive course in 3D modeling of complex organic shapes using the Rhino software along with parametric design plugin Grasshopper3D, taught by ControlMad.

# COATM (Madrid Building Engineer's Association), Madrid (ESP). Building Energy Rating (BER) Course. Nov 2013

12-hour course taught by Madrid's Official Association of Building Engineers on new legislation and requirements relating to BER, and the use of the Spanish government's official software to issue building energy rating certificates.

# Shelter Institute, Maine (USA). Pure Post & Beam Wood Construction Course. April 2013

7-day course in traditional building techniques with wood, taught by The Shelter Institute in Maine. During the course, we learned how to dress wooden beams, carve the necessary joints and assemble a 2-story wooden frame using only manual labor (no electric tools).

#### Hobbies & extracurricular activities:

I like doing DIY projects with a certain degree of complexity; some of my past projects have included:

- Building a 3D printer;
- Building an Arduino controlled desktop CNC machine;
- Building a fully autonomous drone (including designing and 3D printing the structural body).

My next project will be building a 6-axis desktop-size robotic arm.

I also love playing strategy board games such as Carcassonne and Settlers of Catan, binge-watching series, cooking, baking, and camping.

## ▶ Technical Skills

#### Languages:

- Spanish
- English

#### Computer programs:

- Rhino + Grasshopper3D
- Revit BIM + Dynamo
- ArchiCAD (including Grasshopper3D interoperability)
- AutoCAD
- CYPE (Structural, MEP, Cost-Control)
- Microsoft Office Package (& Macros)
- Programming Environments: XCode & Visual Studio
- Unreal Engine 3D experiences
- Web animations
- CMS platforms (Wordpress, Magento)

### Programming languages (in order of skill):

- C# and Python (Scripting & App Development)
- HTML5, CSS and Javascript (Web design and interactive experiences)
- Apple's Swift + Obj-C (Mobile app development)
- LaTeX + Pandoc (Reproductible research and automatic documentation generation)

Basic web server deployment & maintenance

Entry-level knowledge of Cloud Computing & Neural Networks

## Other:

Driving License (B2)

Dual Nationality (Spanish and Irish)

Availability to relocate and travel.

## Additional Information

For more information about me, please visit:

- A. My personal webpage: www.rynne.es
- B. A fully updated version of this CV can be found at: cv.rynne.es
- C. My 2018 portfolio: portfolio.rynne.es
- D. My LinkedIn Profile: www.linkedin.com/in/alanrynnevidal
- E. My Open Source algorithms and scripts can be found on my GitHub Page: www.github.com/AlanRynne
- F. I also recently wrote a small guide about scientific publishing using Markdown+Pandoc that you can find at: alanrynne.github.io/Scientific-Paper-Tutorial