Joshua M. Taron

320 – 12 Ave NE #205 _ Calgary, Alberta T2E 1A4 _ jmtaron@ucalgary.ca
curriculum vitae _ *updated December 2012*

ACADEMIC PROFILE

Degrees

2003– 05	**Southern California Institute of Architecture**, Los Angeles, CA
	Master of Architecture [M.Arch 2]
	Thesis Title: Failed Synthesis
	Thesis Advisors: Benjamin H. Bratton + Hernan Diaz Alonso
1996– 2000	**University of California, Berkeley**, CA
	College of Environmental Design
	Bachelor of Arts in Architecture [A.B.Arch]

Affiliations

2011-	**Member, ASCAAD** (Arab Society for Computer Aided Architectural Design)
2010-	**Member, eCAADe** (Education and research in Computer Aided Architectural Design in Europe)
2008-	**Member, ACADIA** (Association for Computer Aided Design in Architecture)
2008-2009	Board Member, CAUSA (Calgary Architecture and Urban Studies Alliance)

Expertise

Architectural Design; Architectural Design Theory; Integrative Design; Parametric Design Tools; Agent-Based Design Tools; Software Interoperability; Performance Analysis; Geographic Information Systems

TEACHING EXPERIENCE

2008–	**University of Calgary, Faculty of Environmental Design**, Calgary, AB, Canada
	Assistant Professor – tenure track
	- Design Studio Instructor
	- Design Theory Instructor
	- Visual Studies Instructor
	- Elective Instructor
	- Graduate Thesis Advisor
2006– 08	**Southern California Institute of Architecture**, Los Angeles, CA, USA
	Sessional Instructor
	- Design Studio Instructor
	- Visual Studies Instructor
	- Undergraduate Thesis Advisor
2006	**Art Center College of Design**, Pasadena, CA, USA
	Visiting Design Critic
	- Interdisciplinary Design Studio Instructor

Teaching Experience continued

Courses Taught

2012 fall On *Sabbatical Leave*

EVDA 621 Introduction to Design Theories [lecturer]
- The contemporary cultural, social, and philosophical arenas in which architecture exists are examined through lectures, readings, discussions and a series of papers analyzing an individually assigned case study building.

2012 winter **EVDA 782.07 Agents of Subtraction** [Senior Research Architecture Studio]
- Structurally Intelligent Swarms [SIS] are evaluated through their ability to provide subtractive architectural design solutions within already-built environments. Students are trained to use SIS design tools; develop and describe emergent SIS morphologies; explore their formal, programmatic and material potentials; identify and occupy appropriate building typologies/sites for the deployment of SIS.

EVDS 697.72 Swarm Legacies [Advanced Special Topics in Environmental Design]
- In this elective course, students are prepared to independently identify and situate explicit swarm-oriented histories of architecture through a 5000-10,000 word term paper. Content consists of readings, in-class presentations and discussions relating to weekly course topics.

EVDA 543 Graphics Workshop II [course coordinator]
- Instruction and supervised experience in drafting, sketching and rendering; drawing and presentation conventions. Emphasis is placed on data management techniques including parametric modeling and software interoperability in the context of digital fabrication.

2011 fall **EVDA 682.02 Intermediate Architectural Design Studio**
- In this core studio course, students develop design skills through the execution of a small-scaled construction and to develop the design of a large sized mixed-use project with a complex program; develop introductory knowledge of materials and assemblies, building systems, and structural concepts; understand the concept that buildings are ecologies that participate in larger ecologies (flow systems) and the role that technology plays in this interface; develop site design, graphic, concept design, and design development skills.

EVDA 621 Introduction to Design Theories [co-instructor] [course coordinator]
- The contemporary cultural, social, and philosophical arenas in which architecture exists are examined through lectures, readings, discussions and a series of papers analyzing an individually assigned case study building.

2011 winter EVDB 697.49 Drura Parrish: Little Billionaires [Taylor Seminar] [course co-coordinator]
- This workshop guides 30 students over a 1-week period through the inception of product idea, materials and methods of making, production, as well as marketing and sales. The stipulations for the products produced for the workshop are as follows: no assembly; one material; repeatable; original or better an existing product. Each team produces $4,000 (USD retail value) of products with each unit of sellable good not to exceed $20 with a gross profit constituting 53%.

Courses Taught continued

2011 winter (cont) EVDA 582 Foundation Architecture Studio II
- An introduction to the application of ordering principles of architecture and to the numerous layers that contribute to the quality of inhabitation of place and space through design. Issues explored include the formal, the experiential and the theoretical concerns of architectural design in today's cultural context. Students identify and make use of material byproducts associated with acts of residential dwelling. Secondly, students apply digital fabrication techniques toward managing and reproducing material organizations in a manner that maximizes the aesthetic effect of their built presence.

EVDA 543 Graphics Workshop II [co-instructor]
- Instruction and supervised experience in drafting, sketching and rendering; drawing and presentation conventions. Emphasis is placed on generative and procedural design processes in the context of digital fabrication.

2010 fall **EVDS 697.52 Swarm Structures** [Advanced Special Topics in Environmental Design]
- In this elective course, students develop familiarity in working with agent-based models and develop small individual projects for their use and application in/as architectural design. Objectives include: situating agent-based design within the context of contemporary architectural discourse; developing broad understanding of agent-based systems as they exist within spheres outside of the traditional boundaries of architectural discipline; exploring explicit material behaviors through physical models in relation to programmatic-structural formations.

EVDA 682.02 Intermediate Architectural Design Studio [course coordinator]
- Develop design skills through the execution of a small-scaled construction and to develop the design of a large sized mixed-use project with a complex program; develop introductory knowledge of materials and assemblies, building systems, and structural concepts; understand the concept that buildings are ecologies that participate in larger ecologies (flow systems) and the role that technology plays in this interface; develop site design, graphic, concept design, and design development skills.

EVDA 621 Introduction to Design Theories [co-instructor]
- The contemporary cultural, social, and philosophical arenas in which architecture exists are examined through lectures, readings, discussions and a series of papers analyzing an individually assigned case study building.

2010 winter EVDS 783.50 Biomimetic Computation in Art, Architecture and Design [co-instructor]
- Introduces several computational concepts that retrace design methodologies found in natural processes including evolution, development and agent-based behaviors. Students develop their own bip-inspired computational models. Course runs in conjunction with EVDA 782.02 *[Bio]Territories*.

EVDA 782.02 [Bio]Territories [Senior Research Architecture Studio]
- This studio explores the potential afforded by remediating biological processes into computational modeling environments for the purpose of producing architectural form. The studio runs in conjunction with EVDS 783.50 *Biomimetic Computation in Art, Architecture and Design*.

EVDB 697.44 Andrew Kudless: Zero Fold Screen [Taylor Seminar] [course co-coordinator]
- This workshop guides approximately 20 students over a 1-week period through the design and fabrication of a parametrically driven louver screen that minimizes material waste generated through CNC machining.

Courses Taught continued

2010 winter (cont)   EVDA 543 Graphics Workshop II [co-instructor]
- Instruction and supervised experience in drafting, sketching and rendering; drawing and presentation conventions. Emphasis is placed on generative and procedural design processes in the context of various digital fabrication exercises.

2009 fall   EVDA 682.02 Intermediate Architectural Design Studio
- Develop design skills through the execution of a small-scaled construction and to develop the design of a large sized mixed-use project with a complex program; develop introductory knowledge of materials and assemblies, building systems, and structural concepts; understand the concept that buildings are ecologies that participate in larger ecologies (flow systems) and the role that technology plays in this interface; develop site design, graphic, concept design, and design development skills.

EVDA 621 Introduction to Design Theories [co-instructor]
- The contemporary cultural, social, and philosophical arenas in which architecture exists are examined through lectures, readings, discussions and a series of papers analyzing an individually assigned case study building.

EVDA 541 Graphics Workshop I [co-instructor]
- A skill building course with instruction and supervised experience in basic drafting, sketching and rendering; principles of perspective, drawing and presentation conventions. A variety of instruction is offered to accommodate the varied level of student development. Emphasis is placed on 2D to 3D transformations in order to foster knowledge of 3D modeling environments.

2009 winter   **EVDA 782.02 In Silico Innoculation** [Senior Research Architecture Studio]
- This studio reconsiders Architecture's tradition as a monolith of power; instead seeking dynamic and unstable strategies. New aesthetics formed through latent techniques and their immanent behaviors are used to generate a *Museum of the Present*.

EVDB 697.41 Marc Fornes: Aperiodic Symmetries [Taylor Seminar] [course co-coordinator]
- This workshop guides approximately 20 students over a 1-week period through the design and fabrication of a procedurally generated architectural installation.

EVDA 543 Graphics Workshop II [co-instructor]
- Instruction and supervised experience in drafting, sketching and rendering; drawing and presentation conventions. Emphasis is placed on generative and procedural design processes in the context of various digital fabrication exercises.

2008 fall   EVDA 541 Graphics Workshop I [co-instructor]
- A skill building course with instruction and supervised experience in basic drafting, sketching and rendering; principles of perspective, drawing and presentation conventions. A variety of instruction is offered to accommodate the varied level of student development. Emphasis is placed on 2D to 3D transformations in order to foster knowledge of 3D modeling environments.

Courses Taught continued

2008 summer   Making + Meaning: SCI-Arc Summer Program [Design Laboratory Instructor]
- Making + Meaning is a five-week summer program at the Southern California Institute of Architecture (SCI-Arc) that introduces the principles of spatial experimentation and design methodologies through the creative processes of architecture. The design lab exposes students to diverse design methodologies while experimenting with and exploring the properties of different materials. Notions of spatial composition, scale and inhabitation are introduced as week-long assignments and presented in reviews at the end of each week.

2007 fall   DS 1020 2A Studio Formworks: Sites + Contexts [B.Arch]
- Projects work within the variable conditions that determine the characteristics of a site, whether conceptual (eg.musical score, text, painting, idea) or physical (eg.location, geometrically described piece of property, legal boundary condition). Students explore the various conditional relationships that affect the reading and description of sites, and understand circumstance and environment as complex systems of information.

VS 4120 Strategies of Representation 3: Advanced Digital Tools, Modeling and Fabrication [M.Arch1]
- This course provides an introduction to advanced techniques in modeling and fabrication processes by focusing on digital drawing and production tools enabling the development of complex and dynamic surfaces, procedural and parametric forms and the development of the relationship between Architecture and geometry. Projects include prints of digital models using CNC and laser cutter devices.

2007 summer   Making + Meaning: SCI-Arc Summer Program [Design Laboratory Instructor]
- Making + Meaning is a five-week summer program at the Southern California Institute of Architecture (SCI-Arc) that introduces the principles of spatial experimentation and design methodologies through the creative processes of architecture. The design lab exposes students to diverse design methodologies while experimenting with and exploring the properties of different materials. Notions of spatial composition, scale and inhabitation are introduced as week-long assignments and presented in reviews at the end of each week.

2007 spring   DS1051 Undergraduate Thesis Project Studio [B.Arch]
- The intent of the undergraduate Thesis Studio is for students to demonstrate proficiency in making proposals for buildings that integrate knowledge from the principal disciplines represented within the program. Building Design, History, Theory and Humanities, Technology, and Visual Studies weigh into the execution of a synthetic work of architecture. Students work with a committee consisting of representative members of each academic discipline, and design a project from proposals developed in the prior semester. The SCI-Arc undergraduate thesis program culminates in a public one-day event called the Spring Show, where students present their thesis projects to critics from all over the world.

VS4121 Strategies of Representation 4: Advanced Digital Tools, Modeling and Fabrication [M.Arch1]
- The course forms the continuation of Strategies of Representation 3 furthering the knowledge of digital modeling and fabrication techniques by incorporating animation as a dynamic mechanism that extends the spectrum of representational tools. Students are encouraged to explore the sequencing of tools and interrelations between idea and fabrication and space/time related architectural processes.

Courses Taught continued

2007 spring (cont) VS4101 Techniques of Representation 2 [M.Arch1] [co-instructor]
- The course forms the continuation of Strategies of Representation 1 by expanding on the conceptions of representational tools, emphasizing diagramming and spatial representations, and incorporating site analysis, topography and three-dimensional realizations. The program focuses on developing the precision of intentions in the production of architectural drawings and instilling a critical sensitivity for the inherent bias and interface of each deployed medium of representation.

2006 fall VS4030 Technologies of Description 3 [B.Arch]
- The last course in the *Technologies of Description* sequence is an introduction to advanced techniques in digital modeling and processes of fabrication. The work focuses on digital tools that enable the development of complex surfaces, procedural and parametric forms, and basic animation. Projects include work and production of digital models and material output using computer numerical control (CNC) devices as integral tools for the development of architectural conceptions.

VS 4120 Strategies of Representation 3: Advanced Digital Tools, Modeling and Fabrication [M.Arch1]
- This course provides an introduction to advanced techniques in modeling and fabrication processes by focusing on digital drawing and production tools enabling the development of complex and dynamic surfaces, procedural and parametric forms and the development of the relationship between Architecture and geometry. Projects include prints of digital models using CNC and laser cutter devices.

2006 spring DS1210 3GAX Studio; X Lab [M.Arch2 program] [Assistant Teacher] [Instructor: Hernan Diaz Alonso]
- The M.Arch 2 program at SCI-Arc is developing and expanding the domain of emerging technologies in the design and production of architecture. With this in mind, M.Arch 2 students are given the opportunity to continue their explorations and research into the future of architecture into their second year of study through XLAB, an optional studio offered in the third term of the program. Working in a laboratory environment, students develop the knowledge acquired in the first two semesters of the M.Arch 2 program, investigating and applying the possibilities of emerging technologies, theories and model production, and testing new design territories such as scripting, biogenetics, codes, new materials, biomimicry and cellular systems.

ENV 310 Interdisciplinary Studio [Environmental Design + Transportation Design] [co-instructor]
- Generative animation techniques are applied in order to design and experience new modes of automotive interiority and sensations of mobility.

2005 fall DS1200 2GAX Studio [M.Arch2 program] [Teaching Assistant] [Instructor: Hernan Diaz Alonso]
- Conventions and standards in architecture are challenged through a rigorous examination of other models of design and production, such as fashion, art, film and industrial design, creating a nonlinear process that can respond to a number of parameters, while exposing the disparate strategies and technologies inherent in the production of architecture. Students are also exposed to issues concerning the relationship of the part to the whole, repetition and structure, as well as the notion of variation and systemic manipulation through topological evolution.

Graduate Student Supervision (Architecture Master's Degree Projects)

Cotter, Richard *Liminal Landscapes: Post Humanist Heterotopian Urbanism*, M.Arch, 2012. Supervisor.
- Recipient of the 2012 Architectural Research Centers Consortium Jonathan King Student Medal
- Recipient of the 2012 Alberta Association of Architects President's Medal

Onulov, Adam *Urban (de)Resolution: Environments and Counter-environments*, M.Arch, 2012. Supervisor.

Batebe, Anna *Architecture and Fashion: Constructing Identity*, M.Arch, 2012. Supervisor.

McGie, Michael *State of Emergency*, M.Arch, 2012. Supervisor.

Palibroda, Ryan *eNIGMATIC*, M.Arch, 2011. Supervisor.

Zorilla, Carlos *Digital Construction>>Physical Sync*, M.Arch, 2010. Supervisor.

Baic, Branka *Event + Architecture: Questioning the Materiality of Space*, M.Arch, 2010. Supervisor.

Graduate Student Thesis Examiner

Wang, Miaosen MSc., 2012. University of Calgary. Dean's Examiner.

Fritz, Tyler M.Arch., 2012. University of Calgary. Dean's Examiner.

Pasemko, Sarah M.E. Des., 2010. University of Calgary. Dean's Examiner.

Beltran, Juliette M.Arch., 2010. University of Calgary. Dean's Examiner.

Murray, Michael M.Arch., 2010. University of Calgary. Dean's Examiner.

Invited Reviews and Critiques

2012 winter **The Architectural Association**, London, UK
- Michael Weinstock, EmTech City Systems Studio – Guest Critic

University of Calgary, Faculty of Environmental Design, Calgary, AB, Canada
- Branko Kolarevic, Integrative Design Elective – Final Review
- Vera Parlac, Responsive Architecture Research Studio – Final Review
- Jason S. Johnson, Foundation Architecture Studio II – Final Review
- Jason S. Johnson, Foundation Architecture Studio II – Mid-review
- Dustin Couzens, Foundation Architecture Studio II – Final Review
- Dustin Couzens, Foundation Architecture Studio II – Mid-review
- Tomas Debicki, Comprehensive Architectural Design Studio – Final Review
- Tomas Debicki, Comprehensive Architectural Design Studio – Mid-review

2011 fall **University of Calgary, Faculty of Environmental Design**, Calgary, AB, Canada
- Jason S. Johnson, Oils Sands Senior Architecture Research Studio – Final Review
- Graham Livesey, Intermediate Architectural Design Studio – Final Review
- Graham Livesey, Intermediate Architectural Design Studio – Mid-Review
- Keir Stuhlmiller, Intermediate Architectural Design Studio – Final Review
- Keir Stuhlmiller, Intermediate Architectural Design Studio – Mid-review

Invited Reviews and Critiques continued

2011 winter   **University of Calgary, Faculty of Environmental Design**, Calgary, AB, Canada
- Branko Kolarevic, Integrative Design Elective – Final Review
- Jason S. Johnson, Foundation Architecture Studio II – Final Review
- Jason S. Johnson, Foundation Architecture Studio II – Mid-review

University of Calgary, Dept. of Computer Science, Calgary, AB, Canada
Sebastian von Mammen, CPSC 601.55 Biomimetic Computation – Final Review

2010 fall   **Southern California Institute of Architecture**, Los Angeles, CA, USA
- Graduate Thesis Review Weekend

Princeton University School of Architecture, Princeton, NJ, USA
- Hani Rashid, *Zero All Data: Cities from the Ground Up*, Arc 505c Studio – Mid-term Review

University of Calgary, Faculty of Environmental Design, Calgary, AB, Canada
- Dustin Couzens, Intermediate Architectural Design Studio – Final Review
- Dustin Couzens, Intermediate Architectural Design Studio – Mid-review
- Jason S. Johnson, Intermediate Architectural Design Studio – Final Review
- Jason S. Johnson, Intermediate Architectural Design Studio – Mid-review
- Keir Stuhlmiller, Intermediate Architectural Design Studio – Final Review
- Keir Stuhlmiller, Intermediate Architectural Design Studio – Mid-review

2010 winter   **University of Calgary, Faculty of Environmental Design**, Calgary, AB, Canada
- Jason S. Johnson, Senior Architecture Research Studio – Final Review
- Branko Kolarevic, Integrative Design Elective – Final Review

University of Calgary, Dept. of Computer Science, Calgary, AB, Canada
- Sebastian von Mammen, CPSC 601.55 Biomimetic Computation – Final Review

2009 fall   **University of Calgary, Faculty of Environmental Design**, Calgary, AB, Canada
- Marc Boutin, Foundation Architecture Studio I – Mid-review

2009 winter   **University of Calgary, Faculty of Environmental Design**, Calgary, AB, Canada
- Branko Kolarevic, Comprehensive Architectural Design Studio – Final Review
- Jason S. Johnson, Senior Architecture Research Studio – Final Review
- Jason S. Johnson, Senior Architecture Research Studio – Mid-Review
- Branko Kolarevic, Integrative Design Elective – Final Review

PROFESSIONAL EXPERIENCE

Synthetiques

Founder and Principal, 2008 – present

> Synthetiques is an award-winning research+design+build outfit focusing on the hybrid ecologies afforded through the interface of virtual and physical economies across multiple scales. This work is often done in partnership with researchers and practitioners from a variety of disciplines such as computer science, structural engineering and life cycle assessment. The work has been published internationally and orients itself toward mobilizing computation in order to revitalize and sustain the already-built environment.
> - *http://synthetiques.net*

Projects:

2012   Subtractive Structures, Calgary AB, Canada
- Calgary Tower exhibition of Structurally Intelligent Swarms morphology

Chaahk, Think Space *Blur* Competition
- Diller+Scofidio Blur Building reconsidered in the context of geo-engineering
  [1st Honorable Mention]

[de]Stressed Genes, Tex-Fab 3.0 Applied Competition
- tessellated surface exploration of Structurally Intelligent Swarms

SCAR[s], D3 Natural Systems Competition
- collagen grafting techniques applied to an existing building in Calgary

Ambient Exchange, Helsinki Public Library Competition, Helsinki, Finland
- design forms new application for cross-laminated timber using CNC methods
  [in collaboration with Minus Architecture Studio]

2011   **Suburban Subtractions, Migrating Landscapes Competition**, Calgary/Saskatoon/Winnipeg, Canada
- unsettling migratory aspects as architectural form
  [Regional Winner/People's Choice Award]

Animal Stripping, John Fry Pavilion Redux, Edmonton AB, Canada
- oriented feathering applied as water management strategy

Weather Stripping, City of Edmonton Park Pavillion Competition, Edmonton, 2011
- modulated shingle articulation using projected ambient weather maps
  [in collaboration with Minus Architecture Studio]

Scab Wall, Land of Tomorrow Gallery, Lexington KY, USA
- CNC assembly using projected swarms to articulate and deform the finished surface

2010   RE:Connect Devington, Indianapolis IN, USA
- reclamation of abandoned rail line transformed into an urban farm
  [in collaboration with Minus Architecture Studio]

Hemoscape, Calgary AB, Canada
- agent-based urban egress design
  [in collaboration with Dr. Christian Jacob, Synthetic + Computational Biology Lab]

2009   **Greenway Corridor**, Vancouver WA, USA
- $400 million urban design proposal for a community connector spanning across I-5 between Downtown and Fort Vancouver *[in collaboration with Danadjieva+Koenig Associates + HNTB]*

2008   **Orifice Space**, Calgary AB, Canada
- University of Calgary Faculty of Environmental Design conference table

Gorgoneion, Chicago Architecture Club Burnham 2.0 Competition, Chicago IL, USA
- design of high speed rail line terminal at Grand Central Station for the year 2020

LA//PEX, Los Angeles CA, USA
- monocoque assembly for private residence in the Hollywood Hills

Interdependent Congregations, **ENYA South Street Seaport Competition**, New York NY, USA
- monoqoue urban redesign strategy

2007   **Synchopate, SCI-Arc Faculty Competition**, Los Angeles CA, USA
- hybrid monocoque furniture assembly

Xefirotarch, Los Angeles, CA, 2006–2008

Xefirotarch is an award winning design firm in architecture, product design and motion-based media. During my tenure, I was directly involved with all projects coming through the office, directed project teams of multiple scales and oversaw the production of several exhibitions as well as the Xefirotarch monograph titled, *Excessive*.
- www.xefirotarch.com

Project Architect:
- Sundsvall Arts Center, Sundsvall, Sweden
- Fideos Brillantes Bridge, San Juan, Puerto Rico
- Folies Bourgeoisis, Center Pompidou, Paris, France
- Pitch Black, MAK Museum, Vienna, Austria
- Maison Seroussi, Paris, France
- City of the Future, History Channel Competition, Los Angeles, CA
- *[collaboration with Imaginary Forces]*
- Stockholm Public Library, Stockholm , Sweden
- Boston Center for the Arts, Boston, MA
- Art Hotel, Playa Grande, Dominican Republic

Project Manager:
- SFMoMA Design Series IV (solo exhibition), San Francisco, CA
- Xefirotarch: Excessive (monograph book), Huazhong University of Science and Technology Press

Design Team:
- Sangre, SFMoMA, San Francisco, CA

Construction Team:
- MoMA/PS1 Young Architects Program Pavilion, Queens, NY

Andre Rothblatt Architecture, San Francisco, CA, 2001–2003
Studio Designer:
- Various Single-family Residential Projects, San Francisco, CA

RNL Design, Los Angeles, CA, 2000–2001
Staff Designer:
- Lewis Library and Technology Center, Fontana, CA
- Chula Vista Civic Center Master Plan, Chula Vista, CA

Construction Administrator:
- City of Chula Vista Transportation Center, Chula Vista, CA

HOK + LBL Associated Architects, Los Angeles, CA, 2000
Draftsman:
- LAC+USC Medical Center, Los Angeles, CA

ELS Architects, Berkeley, CA 1997–2000
Intern Architect:
- Berkeley Repertory Theatre, Berkeley, CA
- Cragmont Elementary School, Berkeley, CA
- Denver Pavilions, Denver, CO

Professional Design Awards and Recognition

2012   Think Space Past-Forward 2012, Blur Competition, First Honorable Mention, *Chaahk*.

2011   Migrating Landscapes Regional Winner, Calgary AB, Canada.

            Migrating Landscapes People's Choice Award,Calgary AB, Canada.

2009   Honorable Mention (3rd place), Vancouver Community Connector Competition
            [w/ Danadjieva & Koenig Associates + HNTB], Vancouver WA, USA.

2008   Selected Project, South Street Seaport Proposal
            ENYA Center for Architecture, New York NY, USA.

2007   3rd Place, Faculty Boardroom Competition
            Southern California Institute of Architecture, Los Angeles CA, USA.

            IBM Engineering Innovation Award, "Chlorofilia" History Channel City of the Future Competition
            [Xefirotarch + Imaginary Forces], Los Angeles CA, USA.

RESEARCH

Laboratory for Integrative Design [LID]

Co-Founder and Co-Director, 2008 – present

The Laboratory for Integrative Design (LID) explores integrative trajectories and areas of overlap that have emerged through computation between design, its allied disciplines of engineering and construction, and other fields, such as computer science, material science, mathematics and biology. Research consists of experimental projects in which methods, processes, and techniques are discovered, appropriated, adapted, and altered from elsewhere, and digitally pursued. The aim of the LID is to project a fundamentally different attitude towards collaboration, one that needs not be limited to the professions and disciplines comprising the building industry. Researchers at the LID engage design as a broadly integrative endeavor by fluidly navigating across different disciplinary territories, and who deploy algorithmic thinking, computation, digital fabrication, material exploration, and/or performance analyses to discover and create processes, techniques, and products that are qualitatively new.

- http://integrativedesign.org/

Refereed Journal Papers

Taron, J. "Structurally Intelligent Swarms." *Journal of Information Technology in Construction*. 2012.

Von Mammen, S., Taron, J. "A Trans-Disciplinary Program for Biomimetic Computing and Architectural Design." *Journal of Information Technology in Construction*. 2012.

Taron, J., "Interactive Hemostasis Modeling in Urban Network Design." *International Journal of Architectural Computing*. 2009.

Refereed Conference Papers

Taron, J. "Speculative Structures." *30th eCAADe conference: Digital Physicality / Physical Digitality*. Prague, 2012.

Taron, J. "Structurally Intelligent Swarms: Exploiting Interoperability toward Generative Design." *6th ASCAAD Conference: CAAD / Innovation / Practice*. Manama, 2012.

Von Mammen, S., Taron, J. "A Trans-Disciplinary Program for Biomimetic Computing and Architectural Design." *6th ASCAAD Conference: CAAD / Innovation / Practice*. Manama, 2012.

Johnson, J., Marquez, W., Taron, J. "Re:Connecting Devington – Parametric Agriculture." *FORMCities Symposium Publication*. Jackson, 2011.

Taron, J. "Interactive Localized Particle Swarms in Complex Restricted Environments." *ALGODE*. Kanagawa, 2010.

Johnson, J., Taron, J. "Swarms, Cells and Infrastructure: Designing for Indeterminate Futures", *ALGODE*. Kanagawa, 2010.

Taron, J., Von Mammen, S. "Interfacial Design: Situating Contemporary Autopoietic Techniques within the Context of the Autonomy Project and Biotechnological Revolution." *28th eCAADe Conference: Future Cities*. Zurich, 2010.

Von Mammen, S., Jacob, C., Taron, J. "Dynamic and Complex Modeling with Swarms." presented at *Insect Nest to Human Architecture: Workshop on Engineering Principles of Innovation in Swarm-Made Architectures*. Venice, 2009.

Edited Publications

Johannesson, L., Eggermont, M., Taron, J., Adagha, O. (eds), Journal of Computational Media Design, Issue 4, Calgary, Summer 2012.

Taron, J., Parlac, V., Kolarevic, B., Johnson, J. (eds), Integration through Computation: Proceedings of the 31st Annual Conference of the Association for Computer Aided Design in Architecture, ACADIA Press, 2011.

Johnson, J., Taron, J., Parlac, V., Kolarevic, B., (eds). Integration through Computation: Project Catalog of the 31st Annual Conference of the Association for Computer Aided Design in Architecture, ACADIA Press, 2011.

Johannesson, L., Eggermont, M., Taron, J. (eds), Journal of Computational Media Design, Issue 2, Calgary, Summer 2011.

Non-Refereed Publications + Contributions

Taron, J. "Portfolio: Josh Taron." *Journal of Computational Media Design*. Issue 4, Summer 2012.

Taron, J. "On the Integrative Program." *Integration through Computation: Proceedings of the 31st Annual Conference of the Association for Computer Aided Design in Architecture*, ACADIA Press, 2011.

Taron, J. "Inducing Disconnection: Dissensus, Incongruency, Liminality." *Integration through Computation: Project Catalog of the 31st Annual Conference of the Association for Computer Aided Design in Architecture*, ACADIA Press, 2011.

makeCalgary 2011: Catalyst, Feature on CJSW radio (Calgary), produced by Marc Affeld and Kate van Fraassen, Fall 2011. Radio Interview.

Taron, J. and Johnson, J. "An Introductory Conversation." *Journal of Computational Media Design*, Issue 2, Summer 2011.

Invited Lectures

2012   Architectural Association, London UK
- co-hosted by the EmTech and DRL Graduate Programs
- Lecture: Speculative Structures

Yildiz Technical University, Istanbul, Turkey
- Lecture: Speculative Structures

American University of Sharjah, Dept. of Architecture, Sharjah, UAE
- Lecture: Speculative Structures

2011   University of Calgary, ARST 201
- Lecture: Integrative Autonomy

Invited Exhibitions and Installations

2012   Past Forward Exhibition, Storefront for Art and Architecture, New York NY, USA.

      Subtractive Structures, Chancellors Club Event, Calgary AB, Canada.

      Synthetiques + {MAS}, Kasian Gallery Exhibition, Calgary AB, Canada.

      The Heart of the Metropolis – Helsinki Central Library Architectural Competition Exhibition. Jätkäsaari Bunker, Helsinki, Finland.
      [submissions anonymously displayed]

2011   Structurally Intelligent Swarms, in AX2011 Project Exhibition, Banff/Calgary AB, Canada.

      Animal Stripping, in AX2011 Project Exhibition, Banff/Calgary AB, Canada.

      Weather Stripping, in AX2011 Project Exhibition, Banff/Calgary AB, Canada.

      Little Billionaires, Collaboration w/ Drura Parrish, Kasian Gallery Exhibition, Calgary AB, Canada. Coordinator.

      Accumulations, Scab Wall Installation, Land of Tomorrow Gallery, Lexington KY, USA.

2010   Bio-Designs, Research Studio Exhibition, History of Medicine Days Conference, Calgary AB, Canada.

      Zero /Fold Screen, Collaboration with Andrew Kudless, Kasian Gallery Installation, Calgary AB, Canada. Coordinator.

2009   Quarantine, Research Studio Exhibition, History of Medicine Days Conference, Calgary AB, Canada.

      AP Symmetries, Collaboration with Marc Fornes, Kasian Gallery Installation, Calgary AB, Canada. Coordinator.

2008   SSSP Re-envisioning the Urban Edge Selected Project Exhibition, ENYA, New York NY, USA.

Curated Exhibitions

      Integrative Sensibilities (AX2011). EVDS Kasian Gallery/ Banff Center, 2011.
      [Co-curator]

      MAK Center + SCI-Arc Vertical Garden Competition. Los Angeles, 2006.
      [Coordinator]

Research continued

Conferences

2012   eCAADe 2012: Digital Physicality | Physical Digitality, Prague, Czech Republic. Presenter.

                      ASCAAD 2012: CAAD/ Innovation / Practice, Manama, Bahrain. Presenter.

2011   **ACADIA 2011: Integration Through Computation**, Calgary/Banff AB, Canada. **Co-Chair**.

2010   ACADIA 2010: Life in:formation, New York NY, USA. Attendee.

2010   eCAADe 2010: Future Cities, Zurich, Switzerland. Presenter.

2008   ACADIA 08: silicon + skin : biological processes & computation, Minneapolis MN, USA. Attendee.

Workshops

2011   **Particle Protocols Workshop**, University of Kentucky College of Design, Lexington KY, USA.
                      Workshop Leader.

                      Foundational Digital Skills Workshop, University of Calgary, Faculty of Environmental Design,
                      Calgary AB, Canada.
                      Workshop Leader.

                      Little Billionaires, Collaboration w/ Drura Parrish, Kasian Gallery Exhibition, Calgary AB, Canada.
                      Co-coordinator.

2010   Grasshopper via Andrew Kudless, Kasian Gallery Installation, Calgary AB, Canada.
                      Co-coordinator.

2009   rhinoScripting via Marc Fornes + Skylar Tibbits, Calgary AB, Canada.
                      Co-coordinator.

Panel Discussions

2012   **Digital Physicality | Physical Digitality**. eCAADe 2012 conference, Prague, Czech Republic.
                      -   Moderator: Volker Mueller
                      -   Participants: Sigrid Brell-Cockan, Anna-Lisa Meyboom, Joshua M. Taron, Alejandro Veliz.

2011   Integrative Projects. ACADIA 2011: Integration Through Computation, Banff AB, Canada.
                      -   Moderator: Joshua M. Taron
                      -   Participants: Andrew Kudless, Nick Puckett, Gernot Reither, Skylar Tibbits

2010   **Force is a Diagram of Forms: Architecture. Emergence, Emergency**. Designing Geopolitics
                      Syposium, University of California, San Diego CA, USA.
                      -   Moderator: Joshua M. Taron
                      -   Participants: Teddy Cruz, Jordan Crandall, Hernan Diaz-Alonso

                      Bio-Designs. History of Medicine Days Conference, Calgary AB, Canada.
                      -   Moderator: Dr. Frank Stanisch
                      -   Participants: Dr. Christian Jacob, Joshua M. Taron, Dr. Sebastian von Mammen

Research Support

Travel Grant   URGC Faculty Travel Grant, 2012. ($1800)
-   Funds supplemented costs associated with presenting at eCAADe 2012.

Conference Grant URGC Conference Starter Grant, 2011. ($1000)
-   Funds supported publicity and web design costs for the ACADIA 2011 conference.

Research Grant   **URGC Seed Grant,** *Structurally Intelligent Swarms*, 2010. ($17,576)
-   Startup funding for the design and development of materially informed structural morphologies afforded through the parametric integration of agent-based models and structural analysis software.

Digital Coverage

suckerPUNCH, Feature on *The Ambient Exchange* [Helsinki Public Library], 2012.
-   http://www.suckerpunchdaily.com/2012/11/30/ambient-exchange/#more-26412

Europaconcorsi, Feature on *The Ambient Exchange* [Helsinki Public Library], 2012.
-   http://europaconcorsi.com/projects/217007-the-Ambient-Exchange

Archinect, Feature on *The Ambient Exchange* [Helsinki Public Library], 2012.
-   http://archinect.com/news/article/61955739/helsinki-central-library-competition-entry-by-minus-architecture-studio-synthetiques

suckerPUNCH, Feature on *Chaahk* [Past Forward Blur Competition], 2012.
-   http://www.suckerpunchdaily.com/2012/11/19/chaahk/#more-26107

Calgary Herald, Feature on Chancellor's Club event, 2012.
-   http://www.calgaryherald.com/homes/Chancellor+Club+stirs+debate+atop+tower/7526389/story.html

Think Space, Past Forward 2012 Blur Results Announcement, 2012.
-   http://www.think-space.org/en/gallery/past-forward-2012/blur/

suckerPUNCH, Feature on *urban (de)resolution* [Adam Onulov thesis project, Advisor], 2012.
-   http://www.suckerpunchdaily.com/2012/07/25/urban-deresolution/#more-23811

suckerPUNCH, Feature on *Architecture and Fashion* [Anna Batebe thesis project, Adviser], 2012.
-   http://www.suckerpunchdaily.com/2012/06/26/architecture-and-fashion-constructing-identity/#more-22750

Architectural Association, Speculative Structures Lecture [online], 2012 .
http://www.aaschool.ac.uk/VIDEO/lecture.php?ID=1811

Migrating Landcapes, Regional Competition Results Announcement, 2011.
-   http://migratinglandscapes.ca/regional-events/alberta

suckerPUNCH, Feature on Gorgoneion [Chicago Union Station 2020], 2010.
-   http://www.suckerpunchdaily.com/2010/01/03/chicago-union-station-2020/#more-3378

Avenue Magazine, Style Q&A: U of C Professor and Environmental Designer Josh Taron, 2010
-   http://www.avenuecalgary.com/articles/page/item/style-q%2526amp%3Ba%3A-architect-and-environmental-designer-josh-taron

SERVICE

Professional/Community Service

Peer Reviewer ACADIA 2012: Synthetic Digital Ecologies, San Francisco CA, 2012.

Conference Chair **ACADIA 2011: Integration through Computation**, Calgary/Banff AB, 2011.

Peer Reviewer ACADIA Regional Conference - Parametricism: (SPC), Lincoln NE, 2011.

Peer Reviewer ACADIA 2010: Life in:formation, New York NY, 2010.

Founding Director **Design Matters, EVDS Public Lecture Series**, Calgary AB, 2009.
Design Matters is a thought provoking lecture series, organized by the Faculty of Environmental Design (EVDS) that brings to Calgary a range of important speakers who will explore design in our contemporary culture. Lectures are delivered from September to April, and feature provocative speakers who examine issues in architecture, urban design, product design, and landscape ecology. The series challenges the University community and the public to broaden their thinking on a myriad of issues related to design. *Design Matters* is also an opportunity to engage with interested citizens, students, public officials, urban planners, designers, architects and many others. *Design Matters* engages people who want to learn, understand, and address design issues affecting our community.

Invited Participants (in alphabetical order):
- Rob Adams (Director of City Design, Melbourne); Andreu Arriola (Arriola & Fiol Arquitectes);
  Philip Beesley (Philip Beesley Architect Inc.); Julian Bleecker (Near Future Laboratory);
  Benjamin H. Bratton (Center for Design & Geopolitics); Adam Caruso (Caruso St. John Architects);
  Preston Scott Cohen (Preston Scott Cohen, Inc.); Hernan Diaz Alonso (Xefirotarch);
  Craig Dykers (Snøhetta); Marjan Eggermont (Biomimicry Institute); Ingrid Fetell (IDEO);
  Richard T.T. Forman (Harvard GSD); Marc Fornes (THEVERYMANY); Jose Gomez-Marquez (MIT);
  Todd Hirsch (ATB Financial); Shelley Hornstein (York University); Alvin Huang (SYNTHESIS);
  Jeffrey Kipnis (Ohio State University); Ferda Kolatan (SU11); Andrew Kudless (MATSYS);
  Nancy Pollock-Ellwand (EVDS); Bruce Mau (Bruce Mau Design); Thom Mayne (Morphosis);
  Mayor Naheed Nenshi (City of Calgary); Adrian Parr (University of Cincinnati);
  Drura Parrish (PR+vD); Angela Piccini (University of Bristol); John Patkau (Patkau Architects);
  Ali Rahim (Contemporary Architecture Practice); Jane Rendell (Bartlett, UCL);
  Mark Smout (Smout Allen); Marcelo Spina (P-A-T-T-E-R-N-S); Stephen Teeple (Teeple Architects);
  Nader Tehrani (NADAAA); Richard Thieme (Thiemeworks); Leon Van Schaik (RMIT);
  Michael Weinstock (Architectural Association); Tom Wiscombe (Tom Wiscombe Design);
  Ken Wood (Lunar Design).

University Service

Member   Community Engaged Scholarship Committee, 2012 – present

Faculty Rep. Department of Art Academic Council, 2012 – present

Faculty Rep. Libraries and Cultural Resources Academic Council, 2008-2011

Faculty Rep. Faculty of Medicine Academic Council, 2010-2011

Faculty Service

Member   **Architecture Program Curriculum Design Committee**, 2008

Member   EVDS Workshop Committee, 2008 – present

Member   EVDS Marketing Committee, 2008