| No. | Projects   | Designer          | Challenge  | End Date         |
|-----|--|-------------------|--|------------------|
| 1.  | Design & Made in<br>Singapore  | Studio Juju       | Singapore's product<br>culture; examining local<br>production efficiencies                 | March 2022       |
| 2.  | Designing practices<br>for better mental<br>health and well-<br>being at work places | Common<br>Ground  | Sustainable mental health solutions at work  | March 2022       |
| 3.  | Designing the<br>community<br>playground of the<br>future                            | Art-Zoo           | New ways of play in age<br>of digital media,<br>playgrounds for the<br>post-pandemic world | October 2021     |
| 4.  | Designing for<br>enjoyable ageing  | STUCK<br>Design   | Reframing ageing;<br>design for assistive<br>facilities and homes                          | August 2021      |
| 5.  | Werable  | Claudia<br>Poh    | Inclusive fashion;<br>adapativewear for the<br>mobility-challenged                         | January 2022     |
| 6.  | The Next<br>Generation of City<br>Makers   | Shophouse<br>& Co | Youth-driven urban<br>planning and city-<br>making; ground-up<br>participatory design      | March 2022       |
| 7.  | PALFCRAFT:<br>Sustainable PALF<br>Heritage Textiles                                  | NOST              | Heritage and craft<br>preservation; retail<br>reinvention;<br>sustainability in fashion    | December<br>2021 |
| 8.  | KENOPY: Kenaf<br>Biocomposite<br>Canopy Tiles  | Studio<br>SKLIM   | Sustainability in material tiles; shelter technology                                       | March 2022       |

| 9.  | Conversation design<br>for large systems<br>and societies | The<br>Thought<br>Collective | Organisational<br>complexity; conversation<br>design      | February<br>2022 |
|-----|---|------------------------------|---|------------------|
| 10. | Undercurrent  | Rizal Yatim                  | New ways of<br>experiencing music and<br>art performances | July 2021        |

| Duration12 months, ending March 2022ByStudio JujuAbout the<br>designer/<br>Design<br>enterpriseFounded in 2009 by Timo Wong and Priscilla Lui,<br>works across cultures to practise design in furniture, p<br>spaces. | products and   |
|---|----------------|
| About the<br>designer/Founded in 2009 by Timo Wong and Priscilla Lui,<br>works across cultures to practise design in furniture, p<br>spaces.Design<br>enterprisespaces.   | products and   |
| designer/works across cultures to practise design in furniture, pDesignspaces.enterprise  | products and   |
| Design     spaces.       enterprise   |                |
| enterprise  | 1 emotional    |
|   | 1 emotional    |
|   | emotional      |
| Studio Juju designs with fresh perspectives and   |                |
| connection in mind, with thoughtful consideration   | n of human     |
| experiences in contemporary living.   |                |
| In 2014, their work 'Rabbit & the Tortoise Collectio  | n' for Living  |
| Divani was awarded the President*s Design Award's D   | Design of the  |
| Year.   | _              |
| http://studio-juju.com  |                |
|   |                |
| About the The project aims to establish a contemporary produ  | ict label that |
| research takes the approach of being designed and made in   | n Singapore.   |
| The research scope includes conducting research   | n into local   |
| production facilities and identifying unique capabili   | ties that are  |
| able to support the production of design objects.   |                |
| It will include studies into the intangible qualities o   | of Singapore   |
| cultures, lifestyles and history and how its intrins  | sic elements   |
| influence users' perception of Singaporean identities   | ; in design.   |
| What challenge Art and design mirror the society we live in. But glo  | balisation of  |
| does it ideas narrows the differences between cultures of the   | e world.       |
| address?  |                |
| Singapore's product culture has its role in shaping   | our national   |
| identity. The project attempts to discover what we o  | can do here,   |
| influenced by our capabilities, cultures and lifesty  | /les, even if  |
| constrained, to uncover a contemporary design lar   | nguage that    |
| may suggest a Singapore Design Identity.  |                |
|   |                |

|                      | Concurrently, the project focuses on efficient production with<br>resources found here. This meaningful narrative of the project will<br>help build appeal, create ownership and deepen relations<br>between objects and people. |
|----------------------|--|
| Expected<br>outcomes | • Collection of findings and dialogues about design and making in Singapore; the Singapore design identity, cultures, history of industries.   |
|                      | <ul> <li>Profiles the uniqueness of producing in Singapore with various facilities.</li> </ul>   |
|                      | • A collection of contemporary original and functional designed objects inspired by the research of Singapore socio-history and cultures, and our industries.  |
|                      | • An avant-garde design object brand that is designed and made in Singapore to kickstart an authentic conversation of emerging perspectives of Singapore identities and aesthetics in contemporary design.                       |

| Project        | Designing practices for better mental health and well-being                   |
|----------------|---|
|                | at work places  |
| Duration       | 12 months, ending March 2022  |
| Ву             | Common Ground Pte Ltd   |
| About the      | A civic facility that seeks to facilitate the critical partnership            |
| designer/      | between people, public and private sectors. It aims to design and             |
| Design         | implement relevant social innovations that can address issues of              |
| enterprise     | pressing national concerns.   |
|                | https://www.facebook.com/ourcommongroundsg/                                   |
|                |   |
| About the      | The project believes that innovation in the mental health space               |
| research       | can be fuelled by the skillsets of service design as well as                  |
|                | organisational development.   |
|                |   |
|                | It will bring together different disciplines, capitalising on their           |
|                | shared focus of placing the human(s) at the centre. In doing so, it           |
|                | aims to create new languages and ways of working that can drive               |
|                | high impact and sustainable work on mental well-being in the                  |
|                | workplace or work spaces.   |
|                |   |
| What challenge | The project targets two issues: (1) the sustainability and real-              |
| does it        | world viability of cross-domain efforts, and (2) the availability of          |
| address?       | support particularly for persons along the broader spectrum of                |
|                | mental health and wellness who may not have a formally                        |
|                | diagnosed 'condition'.  |
|                | By situating the solution as a ground-up piece, this project allows           |
|                | designers to tap on their client-centered lens to find new ways of            |
|                | mobilising the community to build sustainable networks and                    |
|                | solutions, beyond the medical and/or therapeutic space. This                  |
|                | brings new value to the mental health support ecosystem.                      |
|                |   |
| Expected       | <ul> <li>Identifying both pain points and areas of opportunity for</li> </ul> |
| outcomes       | enhancement of mental health.   |
|                |   |

| • | Findings used as a platform to gather interested designers<br>and organisations who might be interested in using service<br>design to establish new mental health or wellness initiatives,<br>programmes, or policies in house. |
|---|---|
| • | A programme for access to support such as technical design<br>expertise, an understanding of organisational and human<br>dynamics, as well as the mental health context in Singapore.   |
| • | Best practices discovered could have potential to be further scaled.  |

| Project        | Art-Zoo: Designing the community playground of the  |
|----------------|---|
|                | future  |
| Duration       | 9 months, ending October 2021   |
| Ву             | Art-Zoo   |
| About the      | Art-Zoo's mission is to inspire creators for a brighter world. By   |
| designer/      | having various touchpoints such as digital platforms, art   |
| Design         | installations, merchandise and community events, Art-Zoo  |
| enterprise     | enables young children to discover art and nature. It aspires to<br>empower kids to learn through play, inspiring creativity and<br>empathy for the world around us by so they can navigate the<br>challenges of tomorrow and beyond.<br><u>https://artzooworld.com</u>   |
| About the      |   |
| research       | <ul> <li>The project aims to design the community playground of the future by looking into these 3 pillars: <ul> <li>Rethinking the design experience of Art-Zoo playgrounds &amp; touchpoints</li> <li>Establishing the educational framework: promoting creativity and empathy</li> <li>Create the foundation for meaningful storytelling in Art-Zoo</li> </ul> </li> <li>This will take the form of mapping the experience journey of its target audience and co-creating with collaborators and specialists from diverse fields before prototyping ane testing key concepts.</li> </ul> |
| What challenge | In the age of digital media, families and communities continue  |
| does it        | to require spaces to interact, grow and learn. The ongoing  |
| address?       | pandemic has also driven us to consider new ways of playing as a community in a post-COVID world.   |
|                | By reimagining learning and playing, our project empowers<br>children to discover their natural curiosity, and thrive in their<br>elements to create change.  |

| Expected<br>outcomes | • Key findings and the underlying principles that guide the Art-<br>Zoo approach to design and education.                            |
|----------------------|--|
|                      | • A set of physical experience design guidelines and principles that can be implemented in future Art-Zoo projects around the world. |

| Project            | Designing for enjoyable ageing  |
|--------------------|---|
| Duration           | 7 months, ending August 2021  |
| Ву                 | STUCK Design  |
| About the          | STUCK is an award-winning multidisciplinary creative agency in  |
| designer/          | Singapore. The agency's distinctiveness comes from establishing   |
| Design             | fluid intersections amongst various expertise areas such as   |
| enterprise         | Visionary Thinking, Design Research, Industrial Design,   |
|                    | Interaction Design, Brand Activations, and App Development.   |
|                    | This mix of abilities and trans-disciplinary knowledge enable<br>sharp insights to be translated into unexpected ideas and<br>grounded solutions.<br><u>https://www.stuck.sg</u>  |
| About the research | By 2050, 1 in 6 people in the world will be above 65 years old.   |
|                    | Assisted living for elderly are being piloted and are in its nascent<br>stage in Singapore, such as Bukit Batok Community Care<br>Apartments.   |
|                    | There is need to investigate potential options and desirable living<br>experiences for the elderly. And the project hopes to provide an<br>"design and experience lens" to the needs-focused provision of<br>facilities and infrastructure. |
|                    | It will dive into both practical constraints and aspirational lifestyles of seniors and seniors-to-be, and attempt to identify the facets of happy ageing.  |
|                    | By further understanding current offerings of products and<br>services for the elderly, it will provide a point of view, with<br>solutions, how ageing can be.  |

| What challenge | It addresses the need to reframe the common negative  |
|----------------|---|
| does it        | associations of ageing to reposition it as a fulfilling and even  |
| address?       | inspiring experience.   |
|                | The project will demonstrate how this can be translated and achieved starting with our local environments.  |
| Expected       | • A framework for "happy ageing" with insights and outcomes   |
| outcomes       | to guide home or environment design.  |
|                | <ul> <li>A set of physical prototypes and fixture mock-ups tested within real-life domestic settings.</li> <li>A digital platform and knowledge bank for person-centered design.</li> <li>A catalogue of recommended guidelines, products and solutions for seniors, caregivers and operators.</li> </ul> |

| Project                               | Werable   |
|---------------------------------------|---|
| Duration                              | 10 months, ending January 2022  |
| Ву                                    | Claudia Poh   |
| About the                             | Werable is a design studio and its mission to inspire confidence  |
| designer/                             | through easy-to-wear apparel. It believes in pushing the  |
| Design                                | capabilities of clothing to be healthier for our bodies.  |
| enterprise                            | https://www.werable.co  |
| About the<br>research                 | Werable tackles dressing challenges that arise from reduced<br>dexterity and stiff limbs. Our project stems from co-designing<br>with users who value self-care, some of whom are also stroke<br>survivors. Being able to wear what we want can bring people<br>happiness and confidence. It's about having a choice over the<br>kind of experiences we want and the lives we want to live.<br>The project will conclude with a showcase where Werable will<br>launch a collection of tops that can be worn with minimal<br>movement. |
| What challenge<br>does it<br>address? | Dressing is challenging, sometimes impossible, with reduced<br>dexterity. The act of dressing and movements required place<br>unnecessary strain on the body.<br>Users in need of assistance for dressing themselves are also<br>reluctant to ask others for help.<br>Moreover, existing solutions are stigmatized and aren't stylish.  |

| Project  | The Next Generation of City Makers   |
|--|--|
| Duration                                       | 11 months, ending March 2022   |
| Ву   | Shophouse & Co   |
| About the<br>designer/<br>Design<br>enterprise | Shophouse & Co (SHCO) is a placemaking studio that helps city agencies, companies and communities create lovable places to live, work, and play. It does this by developing sustainable placemaking strategies; catalysing communities through creative programmes; and designing interventions that reimagines urban private and public spaces.<br>https://www.shophouseandco.com   |
| About the<br>research                          | With the rising trend of youth involvement in the community,<br>youths have the capacity to be empowered as the urban<br>innovators of the post-Covid world. The project researches into<br>creating a new methodology of city-making, where young<br>community experts can drive innovative, responsive and<br>measurable solutions.<br>By identifying gaps and opportunities in the current city-making<br>system, the project hopes to build capability in youths of multi-<br>disciplines, and develop a ground-up network of young city<br>makers to ideate and implement change in their city. |
| What challenge<br>does it<br>address?          | Urban planning and design have evolved to be more<br>participatory and ground-up since Singapore's early days.<br>By infusing design as a way of life into the mindsets of current<br>and future generation of youths, the project hopes to advance<br>Singapore's brand, culture and community by advocating for the<br>youths' voices to be heard on a city-wide scale.<br>With youth-driven innovations and partnerships, it normalises<br>civic participation in city-making and reduces potential of failure<br>through tactical methods and public buy-in.                                     |

| Expected | • Systems mapping that illustrates the city-making process.   |
|----------|---|
| outcomes | • Curriculum design of city-making courses designed for youth learning.   |
|          | • Online directory for youths to exchange knowledge, build community and engage in local city-making opportunities. |

| Project  | PALFCRAFT: Sustainable PALF Heritage Textiles   |
|--|---|
| Duration                                       | 9 months, ending December 2021  |
| Ву   | NOST  |
| About the<br>designer/<br>Design<br>enterprise | NOST is a sustainable lifestyle and loungewear label founded by<br>Felicia Toh. Designed by architects and handcrafted by artisans in<br>Asia, NOST textiles celebrate heritage craftsmanship such as<br>batik, block-printing and handloom weaving. NOST printed<br>textiles are designed from scratch instead of sourced, which<br>enables the brand to specify sustainable raw materials such as<br>organic cotton and tencel, and the use of low-impact dyes such<br>as plant-based and azo-free dyes.<br>The brand's vision is to bridge makers to markets, through<br>partnerships that tap on innovation to preserve heritage and<br>resource vulnerable communities.<br><u>https://www.nostshop.com</u> |
| About the research                             | PALF is derived from pineapple leaf fibres, an agricultural by-<br>product found abundantly in Southeast Asia. Conventionally<br>burnt away and disposed of as waste, the conversion of PALF into<br>usable textiles creates a circular economy that simultaneously<br>reduces waste, cuts air pollution from burning, and provides the<br>fashion industry with a new, sustainable alternative to fabrics such<br>as polyester and cotton.<br>This project researches the use of artisan-printed and woven<br>PALF (since and parts), some and (shaira in light) with a new  |
|  | PALF (pineapple leaf fibre) yarns and fabrics in lightweight<br>apparel and textiles. It will be a market first product featuring<br>commercially available PALF fabrics that are printed and woven<br>using heritage artisanal methods of batik-printing and loom<br>weaving.  |
| What challenge<br>does it<br>address?          | A 2019 McKinsey report cites that 55 percent of apparel companies surveyed wanted at least half of their products to be made with sustainable materials by 2025.  |

|                      | The development of PALF textiles with a strong design story and<br>heritage craftsmanship will address increasing demand for<br>sustainable fabrics in the apparel and textile industry, as<br>companies and consumers shift away from petroleum-based and<br>resource-intensive fabrics.<br>Traditional artisanal crafts such as batik printing, block printing<br>and step loom weaving are also on a steady decline, as artisans<br>are unable to compete with commercial mass production.<br>By putting a reliable source of commercially available PALF yarns<br>into the artisans' hands, coupled with architecturally-inspired<br>prints made using heritage textile methods, the project seeks to |
|----------------------|---|
| Expected<br>outcomes | <ul> <li>combine innovation with heritage in their new range of fabrics</li> <li>A product capsule of loungewear and home goods using batik printed PALF blend fabrics, for showcase at National Design Centre.</li> <li>Research Handbook on PALF Research Findings containing research outcomes of PALF blend composition tests in terms of hand-feel and other material properties; best practices for batik printing of PALF blend textiles, and or weaving of PALF textiles from PALF yarn, and PALF blend textile swatches in a variety of prints, weaves and textures.</li> <li>A lifestyle lookbook compiling the use of PALF-blend fabrics in apparel and home goods.</li> </ul>                 |

| Project        | KENOPY: Kenaf Biocomposite Canopy Tiles                              |
|----------------|--|
| Duration       | 12 months, ending March 2022   |
| Ву             | Studio SKLIM   |
| About the      | Studio SKLIM is an award-winning design agency crafting              |
| designer/      | bespoke spatial solutions. Based in Singapore and operating          |
| Design         | globally. The studio was founded by Kevin Lim, an alumnus of         |
| enterprise     | the Architectural Association, London and the National University    |
|                | of Singapore. His past collaborations include OMA (The Office of     |
|                | Metropolitan Architecture), founded by Rem Koolhaas.                 |
|                | https://sklim.com  |
|                |  |
| About the      | The project plans to study and use renewable bio-based materials     |
| research       | to evaluate their applicability in being re-engineered as            |
|                | sustainable building components. It will utilise upcycled kenaf      |
|                | bio-waste and industrial waste content (such as slag, fly-ash, lime, |
|                | etc) to develop the KENOPY shelter prototype. This will help         |
|                | reduce the amount of non-renewable resources being depleted          |
|                | and reduce waste going into landfills or polluting the earth.        |
|                | The benefits of the prototype are:                                   |
|                | a) Providing thermal comfort and protection from the                 |
|                | weather elements   |
|                | b) Making use of Kenaf biomass which typically gets thrown           |
|                | away or burned.  |
|                | c) Creating economic impact at many levels of society;               |
|                | reintroduce farming, manufacturing of renewable building             |
|                | products.  |
|                |  |
| What challenge | Singapore is constructing 150 km of sheltered linkways by 2040       |
| does it        | (source: LTA 2040 Masterplan). The existing set of materials used    |
| address?       | for shelter construction is non-renewable and generate a             |
|                | significant amount of greenhouse gases.                              |
|                |  |
|                | By evaluating and understanding the full potential of using          |
|                | biocomposites for producing both interior and exterior               |

|                      | architectural tiles, the project will offer an ecological and sustainable material solution for shelter technology.   |
|----------------------|---|
| Expected<br>outcomes | <ul> <li>Development of a durable tile technology that has inherent adaptability for multiple applications: roofing, façade shingles, interiors, furniture, etc.</li> <li>A preliminary model to predict where energy in buildings can be saved or provide thermal comfort under shelter through the employment of KENOPY tiles.</li> <li>A prototype of Tropical Kenaf Teahouse or covered linkway to showcase the possibilities of KENOPY tiles.</li> </ul> |

| Project        | Conversation design for large systems and society: Creating   |
|----------------|---|
|                | trust and progress amidst current complexity through  |
|                | effective narrative and dialogue design   |
| Duration       | 12 months, ending February 2022   |
| Ву             | The Thought Collective (TTC)  |
| About the      | A group of social businesses sharing the same mission to build  |
| designer/      | up the social and emotional capital of Singapore, TTC's first   |
| Design         | businesses include School of Thought and Think Tank Studios – a   |
| enterprise     | learning centre and the content publishing agency focused on  |
|                | helping youth, educators and the general public make meaning  |
|                | of complex issues, and the Food For Thought cafes.  |
|                | Since 2015, TTC branched out into the field of human and organisational development work through training, coaching, facilitating, and designing cultural change strategies and interventions.<br>https://thethoughtcollective.com.sg |
| About the      | The project will focus on how rapid organisational growth and   |
| research       | increasing diversity (race, ethnicity and nationality) impact   |
|                | organisational conversations and create complex organisational  |
|                | issues. The project will include a systematic survey of current   |
|                | facilitation practices and the organisation challenges, bringing  |
|                | these together to develop an integrated conversation design   |
|                | methodology, and finally putting it to the test through   |
|                | organisation-based prototypes.  |
|                | The project aims to better equip organisations in Singapore<br>(especially those planning to scale and diversify quickly) to handle<br>the cultural complexities that are already present or will inevitably<br>emerge.               |
| What challenge | Large systems and organisations struggle with multiple demands  |
| does it        | and conflicting narratives. Left unmanaged, this complexity can   |
| address?       | confuse, cripple or even break systems.   |
|                |   |

|                      | Organisations are essentially linguistic phenomena. It is through<br>language and conversations that individuals and groups establish<br>power, networks, information flows and action steps so that they<br>can reach outcomes. Organisational health and sustainability<br>depend on everyone's skills in having intentional conversations,<br>facilitating crucial conversations, moving "stuck" conversations,<br>and more.<br>Key conversations can - and must - be intentionally designed to<br>be effective. |
|----------------------|---|
| Expected<br>outcomes | <ul> <li>Development of conversational design processes and<br/>methodology as "proof of concept".</li> <li>A curriculum for training dialogue practitioners.</li> <li>A plan to share outcomes with partners, agencies, and<br/>organisations.</li> </ul>  |

| Project  | Meta—current   Carving a space where sounds and ideas can cavort in circuitry   |
|--|---|
| Duration                                       | 5 months, ending July 2021  |
| Ву   | Rizal Yatim   |
| About the<br>designer/<br>Design<br>enterprise | A strategic design and innovation practice helmed by Rizal<br>Yatim, Undercurrent is built upon a universal outlook towards<br>change and progress. By working with the transmedia art studio,<br>Metamo Industries, it is carving a new space for sounds and<br>ideas.   |
| About the<br>research                          | It was a massive blow for the music and art scenes when live<br>social events were put to a halt due to COVID-19. The project<br>believes we can shape a new way of experiencing music and art.<br>It aims to capture this evolving process through the lens of<br>customer experience while exploring a bold new service model<br>for music and art experiences beyond the crisis.   |
| What challenge<br>does it address?             | The turn towards virtual shows in the wake of COVID-19 seems<br>as an obvious transition but most of them fall short of replacing<br>physical live concerts and festivals entirely.<br>As safety measures are gradually lifted and more hybrid events<br>emerge, the project examines how we might elevate the music<br>and art experience by closing the gap between artistic<br>expression and cutting-edge technology such as virtual reality. |
| Expected<br>outcomes                           | <ul> <li>A Proof-of-Concept novel service model for music and art.</li> <li>An iterative digital playbook as part of a community resource.</li> </ul>   |