

IVAN FERDO JAYAPURNA

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EDUCATION

University of California, Berkeley

PhD in Computational Biomaterials Science & Engineering

Aug 2019 – Present

B.A. in Computer Science & B.S. in Chemical Engineering (High Honors)

Aug 2015 – May 2019

EXPERIENCE

Ting Xu Group | Berkeley, CA

Polymeric Materials Researcher & Research Software Developer

Dec 2016 - Present

- Developing software tools to streamline internal workflow, such as a block copolymer synthesis planner.
- Invented a novel block copolymer for gas barrier material applications (publication pending).
- Designed, synthesized and characterized self-assembling block copolymers and random heteropolymers.

SWARM Lab (Pister Group) | Berkeley, CA

Undergraduate Researcher

Jul 2018 – Dec 2018

- Built a mesh-networked, micro-robot swarm simulator for developing networking algorithms.
- Developed low-power convolutional neural networks for object detection and classification.

Visolis | Berkeley, CA

Software Engineer Intern

Dec 2017 - Jul 2018

- Built a data-driven biochemical synthesis tool of 500,000+ unique, computationally predicted pathways.
- Scraped 1,000,000+ records from literature to populate databases and create traversal heuristics.
- Saved \$10,000+/year by building a text-to-SQL parser-scraper, for a comprehensive enzyme repository.

Wristband International | Bangkok, Thailand

Cofounder

Dec 2012 - Jan 2015

- Founded the largest online custom wristband business in Bangkok, growing to 100,000+ Facebook likes.
- Managed a sales team of 50+ people & sold over 100,000+ silicone wristbands over 2 years.

LEADERSHIP

External Vice President, American Institute of Chemical Engineers

Apr 2016 - May 2019

- Increased corporate funding by 110% by crafting a new sponsorship package and outreach strategy.
- As External VP, led a team of 12 to organize 10+ corporate info sessions and 3 formal networking events.

Cofounder & Consultant, Chec Consulting

Jul 2017 - Aug 2018

- Founded the organization with a team of 6; managed recruiting and team structuring.
- Proposed a new microfluidic device design to optimize pathogen capture rate by modelling flow in COMSOL.

LANGUAGES & INTERESTS

Languages: English, Indonesian, Chinese; Python, Java, C++, C, JavaScript, SQL, Unix Shell Scripting

Interests: CleanTech (Renewable Energy, Degradable Plastics, FoodTech), Synthetic Polymer Sequencing, Machine Learning, Robotics & Automation; Soccer, [Computational Art](#), [Writing](#)