# **Andrew Raharjo Tsai**

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#### **EDUCATION**

**University of California San Diego** 

MSc in Enterprise Architecture (GPA: 3.87)

Florida Institute of Technology

MSc in Electrical Engineering (GPA: 3.83)

**Universitas Pelita Harapan** 

BSc in Computer Engineering (GPA: 3.36)

San Diego,CA

Graduation Year: 2021

Melbourne, FL

Graduation Year: 2014

Karawaci, Indonesia

Graduation Year: 2010

#### **WORK EXPERIENCE**

**Pratt & Whitney** 

Sr. Manager Business System & Transformation

Carlsbad, CA

July 2021 - Present

- Create road maps, digital thread vision & requirements for digital transformation on product implementation & integration to secure & execute the digital enterprise funding for the site at \$3.3M in a span of two years capital expenditure.
- Collaborate with VP of Finance, Engineering, and Operation to grow the manufacturing operation services for low-rate initial production for GTF engine, implementing DevSecOps to shop floor with increase in operation volume by \$310k for FY2021.
- Utilize CRM platforms including Salesforce & SAP to service 53+ manufacturing requests daily through MES, working with operational excellence team to identify pain points & engineering opportunities for digital transformation success stories.

## **Northrop Grumman Mission System**

Sr. Principal System Engineer

San Diego, CA

Feb 2016 – July 2021

- Created & delivered automated test equipment to production floor for testing communication, navigation, identification software defined radio modules to increase the capacity utilization rate by 57% per week for combined RF & power modules.
- Influenced leadership to made decision to utilize mixed reality to reduce error in automated test equipment training & operation for shop floor technicians, increasing in total available production hours from 63 hours to 76 hours per cell by integrating mixed reality to manufacturing execution system.
- Implemented & executed product plan, schedule, cost account, & sustainment for low-band power amplifier & UHF/VHF Pre-Selector module, including acceptance test & environmental automated test equipment which result in cost savings by \$130k/year in production.

#### **Lockheed Martin Space System**

Software Test Engineer

Sunnyvale, CA

May 2014 - Feb 2016

- Presented recommendation for acceptance testing strategies including flight controller & interlock test system to flight director, streamlining the procedure for each test equipment safe-to-turn-on which reduced by 4 hours per 11 startup tests.
- Prepared P&L matrix for schedule & cost-per-index with cost account manager & chief engineer to identify requirements gap on D5 Flight control test development, analyzed trade studies & white paper for testing KPI which increased efficiency of deliveries from development to production by 17% per month.
- Completed delivery of end-to-end system for Burn-In Test Console Test Equipment to increase D5 Trident Missile quality assurance right first time KPI by 21% leading per month.

## **LEADERSHIP EXPERIENCE**

# Team Inspiration RoboSub/RoboX

Technical Advisor/Coach

San Diego, CA

July 2020 - Present

- Partner with UC San Diego faculty members and 20+ professionals in various tech firms and organization, bringing out technical insight for electrical board design, power system, perception code, and industry partnerships.
- Mentored UC San Diego students to analyze machine learning algorithm, build-to-deploy code test, and hardware integration.

#### **SKILLS & INTERESTS**

Skills: Microsoft Office | SAP | Solumina | Teamcenter NX | Salesforce | National Instruments Interests: Finance, Operation & Manufacturing in Healthcare, and People Leadership