

DILLON HANDAL

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EDUCATION

University Of California, San Diego

BS/MS Computer Science

Sep 2018 – Jun 2023

La Jolla, CA

- GPA: 3.9 - Provost Honors
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WORK EXPERIENCE

University of California, San Diego

Tutor

Jan 2020 – Present

La Jolla, CA

- Courses: CSE 30 (Assembly), CSE 140 (Digital and Sequential Logic Design), CSE 140L (Verilog)
- Hold weekly office hours and discussion sections to assist students with current assignments and material
- Create well-designed problems for exams to accurately evaluate students' understanding of course material

Synopsys Inc (Solutions Group - ARC Processor IP)

Computer Engineering Intern

Jun 2021 – Sep 2021

Mountain View, CA

- Developed Python scripts to help with IP library build automation and reduce FMEDA generation time from several hours to a few seconds
- Implemented and tested EDC error injection scheme to reduce decoder area consumption by roughly 70%

University of California, San Diego

Software Engineer

Jun 2020 – Sep 2020

La Jolla, CA

- Led the development of a web app to search for quiz questions on sites such as Chegg and Coursehero which helped to detect several academic integrity violations
 - Frontend and backend using Django, HTML, CSS, and JavaScript with PostgreSQL as the database
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SKILLS

- Python, C/C++, Assembly, Java, JavaScript/CSS/HTML, Verilog, System Verilog
 - Deep Neural Network Design
 - Computer Vision
 - Algorithm Design and Analysis
 - ATPG Testing Methods (Fault Equivalence, D-algorithm, Socrates, PODEM, FAN, DFT, BIST)
 - Sequential Logic Design (State Minimization, State Encoding, Datapath and Controller Design)
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PROJECTS

- Conducted research and led discussions in weekly computer engineering research group meetings with 12 other masters and PhD students
 - Created 3D scenes with animation and particle systems using OpenGL
 - Implemented U-Net for accurate image edge detection with a final BCE loss of 0.006
 - Predicted vehicle trajectories through a temporal convolution network achieving a final RMSE of 2.44
 - Built a transformer neural network to recommend video games for Steam users achieving a Hit Rate @10 of 0.835
 - Performed object 6D pose estimation using ICP achieving a 91% pose accuracy
 - NeRF implementation for representing a scene of bottles achieving a test PSNR of 30.3
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HOBBIES

- Wind Ensemble
- Basketball
- Japanese (conversational)
- Traveling
- Nixie Tube Clock
- Keyboards