

Chris Rockwell

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EDUCATION	University of Michigan (College of Engineering) <i>Master of Science, Computer Science and Engineering</i> <ul style="list-style-type: none">• GPA: 4.00/4.00 GRE Quantitative: 170/170• Advisors: David Fouhey, Jia Deng	Ann Arbor, MI Sep. 2018 - May 2020
	University of Michigan (College of Literature, Science and Arts) <i>Bachelor of Science, Economics, Magna Cum Laude</i> <i>Minors in Computer Science and Mathematics</i> <ul style="list-style-type: none">• GPA: 3.95/4.00	Ann Arbor, MI Sep. 2011 - May 2015
INTERESTS	Computer Vision, Machine Learning	
RESEARCH EXPERIENCE	Fouhey AI Lab (FAIL) <i>Graduate Research Assistant</i> Advisor: David Fouhey 3D Single Person Human Pose Estimation	Ann Arbor, MI May 2019 - Present
	Princeton Vision and Learning Lab (Formerly Michigan VLL) <i>Graduate Research Assistant</i> Advisor: Jia Deng 2D Single Person Human Pose Estimation <ul style="list-style-type: none">• Improved <i>Stacked Hourglass</i> score from 90.9% to 91.3% on MPII using better regularization• Used bottleneck-to-attention mechanism with regularization to improve 2HG performance 0.7%• Increased precision of network confidence, explored utilizing for curriculum sampling of tail cases Meta-Learning <ul style="list-style-type: none">• Enhanced fine-tune model on <i>Meta-Dataset</i> to within 0.1 <i>avg. rank</i> of meta-learning benchmark	Ann Arbor, MI May 2018 - May 2019
	Strategic Reasoning Group <i>Undergraduate Research Assistant</i> Advisor: Michael P. Wellman Agent-based simulation of High-Frequency Trading and Latency Arbitrage	Ann Arbor, MI May 2013 - Jul. 2013
PROFESSIONAL EXPERIENCE	Citadel LLC <i>Trader, Global Fixed Income (Core Team)</i> Assisted Portfolio Manager (PM) and Head of Fund in managing risk and generating trade ideas <ul style="list-style-type: none">• Built various screeners and monitors using pandas to pitch linear relative value trades in G10 rates• Led research for and managed regression-based statistical arbitrage trading strategy Designed and implemented tools to better construct and manage PM and Head of Fund's portfolio <ul style="list-style-type: none">• Constructed custom clustering algorithm to view trades in an elegant manner• Wrote script using scipy to optimize portfolio Sharpe ratio subject to constraints	New York, NY Apr. 2017 - Oct. 2017
	BNP Paribas <i>Interest Rates and FX Structuring Analyst (Intern in summer 2014)</i> Priced, modeled and executed exotic and bespoke products <ul style="list-style-type: none">• Created pricing models and back-tested performance of bespoke structures using Python• Co-managed \$1bn inflation-linked TRS: extended pricing models, priced and executed hedges Created and analyzed systematic hedging strategies and trade ideas <ul style="list-style-type: none">• Engineered framework to measure risk on a portfolio basis and evaluate hedging strategies using multiple factors, used this to help redesign hedging program of a top 10 company by market cap	New York, NY Jul. 2015 - Mar. 2017

HONORS & AWARDS	University of Michigan	Ann Arbor, MI
	Research Experience for Undergraduates Award	2013
	James B. Angell Scholar	2013, 2014, 2015, 2016
	William J. Branstrom Freshman Prize	2012
	University Honors	2011,2012,2013,2014,2015
	Phi Kappa Phi Honors Society	2015

TEACHING & ACTIVITIES	Grader: EECS 598 Deep Learning
	Technical Mentor: mentoring one undergraduate with Prof. Fouhey, mentored two interns at BNP
	Academic Mentor: mentored two undergraduate CSE students, master's orientation panelist
	Graduate Student Advisory Committee: represent CSE MS students to improve graduate experience

SALIENT COURSES	University of Michigan, MS:
	Deep Learning for Computer Vision (no class project)
	Machine Learning: replicated and improved validation accuracy on <i>Stacked Hourglass Networks</i>
	Advanced AI: replicated <i>Image Generation from Scene Graphs</i> and extended evaluation to use VQA
	Self-Driving Cars: fine-tuned <i>Squeeze and Excitation ResNet</i> for road-side classification
	Advanced Data Mining: performed link prediction using <i>SDNE</i> on sparse, temporal graphs
	University of Michigan, BS:
	AI, Linear Algebra, Numerical Methods, Econometrics, Real Analysis, Data Structures and Algorithms